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As the size and scope of the education endeavor continues to grow, the single school or district is finding it more difficult to maintain an outstanding educational program on its own. The complex needs of society demand complex programs which the school cannot afford. For this reason, and as an attempt to cut down waste and duplication of effort in the school, cooperative regional provision of programs and services is becoming necessary.

The possibilities for regional provision of programs and services are explored. The report: concentrates on regional provision of services, explaining how the regional service center might be set up, how it operates, the role it can play, and the problems faced in implementing it; identifies the various service components that might go into a center, explaining their operation and implications for facilities; and illustrates the regional approach by means of a schematic study based on a hypothetical region and presents a building program and relationship diagrams.

An appendix, a list of consultants and visits, a bibliography, and a components index are included.

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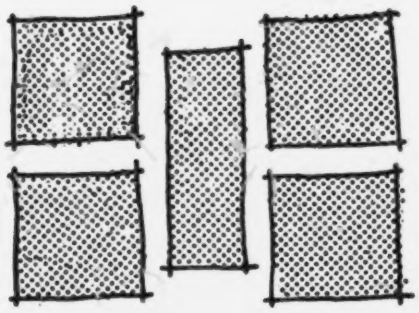

regional education service centers

by David S. Haviland

Research Assistant in Architecture, Rensselaer Polytechnic Institute, Troy, New York . . . . 1 June 1965

(this document was submitted in partial fulfillment of the requirements for the degree of Bachelor of Architecture.)

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preface

"Regional Education Service Centers" is the report of a project conducted by David S. Haviland, fifth-year student in the School of Architecture at Rensselaer Polytechnic Institute. The project was undertaken under the auspices of the architectural research office at Rensselaer, and was supervised by Professors Harry E. Rodman, Morton C. Gassman, and Alan C. Green.

This report is also being submitted to the New York State Education Department in hopes of dissemination to local boards throughout the state, informing them of the possibilities of regional development. For this reason, Dr. Norman D. Kurland, Director of the Department's Center on Innovation, and Mrs. Esther Swanker, the Department's consultant on Supplementary Educational Centers and Services, provided continuous advice and assistance throughout the project.

The author would like to take this opportunity to express his appreciation for the patience and valuable assistance offered by each of the above, and by everyone else who -- in large or small way -- participated in the project and the preparation of the report.

d.s.h.

troy, new york
1 june 1965

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introduction

As the size and scope of our education endeavor continues to grow, the single school or district is finding it more difficult to maintain an outstanding educational program on its own. The complex needs of today's society demand complex programs which even the large "comprehensive" school cannot afford.

For this reason, and as an attempt to cut down waste and duplication of effort in our schools, co-operative regional provision of programs and services is becoming an educational "fact of life" in the 1960s. Most regional programs, however, are small and tend to concentrate efforts in a few particular areas. Few studies have been undertaken to determine just what range of activities can ultimately take place on a regional level.

In recognition of this need to extend our thinking, and in recognition of the national emphasis now being given to regional development, this report plans,

- To explore briefly the possibilities for regional provision of programs and services.
- To concentrate on regional provision of services, explaining how the regional service center might be set up, how it operates, the role it can play, and the problems faced in implementing it.
- To identify the various services "components" that might go into a center, explaining their operation and implications for facilities.
- To illustrate the regional approach by means of a schematic study, based on a hypothetical region and resulting in a building program and relationship diagrams.

I

REGIONAL DEVELOPMENTS IN PERSPECTIVE

PART I 1 THE HISTORY

chapter 1

The Self-Contained Classroom

Since its formal beginnings in the mid-nineteenth century, American education has adopted the concept of the self-contained classroom. Here students, working under one teacher, are exposed to a polyglot education dispensed by this one teacher and information-giver.

As a product of its time, the self-contained classroom worked well; it broke down the large Lancastrian groups, and began to "give the student a chance" to learn. When times began to change, though, it did not change with them. The day of the teacher as the knower-of-all-things began to pass; there was just too much information for one person to know. As the number of students in the schools began to swell, the problem became more and more acute. The information and population explosions were beginning to take their tolls.

Now, in the 1960s, few really believe that one teacher and one textbook can adequately do the job. We are beginning to see new staff organizations, new time arrangements, new emphases on individual differences, and new instructional aids and media being developed to help accomplish what the one teacher had to do in 1850. In short, the self-contained classroom is being exploded wide-open!

The Self-Contained School

Perhaps a logical extension of the self-contained classroom is the "self-contained school." Following age-old principles of home rule, each district developed its own programs, hired its own staff, bought its own materials, and built its own facilities to house them.

The same forces at work on the self-contained classroom are also attacking the self-contained school. While the single-room schoolhouse and its successors had little trouble in providing the programs, the staff, the materials and the facilities, schools in the 1960s find they are often hard put to do so. There is just too much to do!

The Interim "Solution"

What most schools have done to keep their heads above water has been to paddle faster! They have necessarily concentrated their efforts in the areas of vital concern. Hence we see schools all over the country with strong points -- a good science program, a fine film library, an outstanding in-service program, an efficient school office -- but these schools have weak points too. Concentrating time, talent, and money in a few areas at the expense of others is not really solving the problem.

Rural vs Urban

There was a time when all of this was considered a "rural" problem. Districts were pushed to centralize in order to provide more comprehensive programs, and even New York's co-operative BOCES* boards were established as part of the Department's Bureau of Rural Administrative Services.

We are just now realizing that even city and large suburban schools cannot provide all they want to provide. Their basic instructional programs may be more effective than those of the schools in the outlying rural areas, but they still find that they are forced to abandon many new efforts and ideas for lack of time, talent, and money.

---

* BOCES is the acronym for New York State's intermediate Boards of Co-operative Educational Service.

A Regional Approach

Seeing that constant improvement of all facets of education on the local level was becoming out of the question, administrators began to look toward a regional approach -- an approach where schools could get together and co-operatively fund programs and services that none could afford individually.

The regional approach presented many problems. Getting together districts used to a century of home rule was a tough task; providing the legal machinery for them to do so was often a tougher task. The clear logic of the regional solution was undeniable, though, and co-operative associations slowly came into being. They have multiplied, consolidated, and reorganized to the point that New York is covered with various intermediate Boards, BOCES boards, and even new possibilities if bills in Legislature are passed.*

The Programs and Services

The programs and services provided by BOCES and other co-operatives were at first limited. A vocational school, a film library, an equipment pool, a co-op purchasing program were all stabs taken at solving the problems faced by the self-contained school.

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* It remains an important task for the State Education Department to aid in clarifying the positions of these various intermediate authorities.

The number and types of these programs has been growing steadily; in 1963-1964 the State Education Department reported that 75 BOCES boards in the state were operating 1,940 programs involving shared services. The larger towns and cities were "getting on the bandwagon," too.

Accelerating the Pace

But the rate of co-operative development has not been sufficient to match the pace set by the information and population explosions. Educators are also wondering why a greater depth and variety of programs and services cannot be provided on the regional level.

Recognizing this lag, the U. S. Office of Education began to push for legislation and appropriation to aid regional development. The Result is Title III of the Elementary and Secondary Education Act of 1965.

Title III: A "Jumping-off Point"

Title III will become a milestone on the road to regional development. Considering total costs of education, its $100 million appropriation may seem "a drop in the bucket," but it shows national concern for the problem, and authorizes projects to get new programs underway and to extend older ones.

The "Supplementary Educational Centers and Services" provided for in Section 303 of this title can cover a wide range of activities*, a point that local agencies will undoubtedly take advantage of. Title III and its built-in flexibility will indeed provide a good "jumping-off point" for regional developments on a much greater scale than we know them now.

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* Section 303 of Title III is appended to this report.

PART I 2 THE POSSIBILITIES

chapter 2

Two Major Concerns

In exploring the possibilities for regional development, there seem to be two major areas of concern -- that of programs, and that of services. Title III of the Elementary and Secondary Education Act of 1965 reinforces this contention by stating in its first paragraph:

> The Commissioner shall carry out . . a program for making grants for supplementary educational centers and services, to stimulate and assist in the provision of vitally-needed educational services not available in sufficient quantity or quality, and to stimulate and assist in the development and establishment of examplary elementary and secondary school educational programs to serve as models for regular school programs.*

Programs

The term "program" can be all-inclusive, and there are a great many possibilities for providing or extending such programs on the regional level. Some might include:

- special efforts for gifted children.
- seminars and field trips for college-bound students.
- preschool instruction, nursery and day-care schools.
- programs for the culturally-deprived,

---

* U. S. Public Law 89-10, Section 301.(a).

- programs for the mentally-retarded.
- programs for the sightless, deaf, and hard-of-hearing.
- physiotheraphy programs for the disabled.
- programs for the emotionally-handicapped.
- adult education.
- co-operative "work-learn" programs.
- job retraining and industry-associated programs.
- vocational and technical training programs.
- specialized instruction and equipment for students to study advanced programs not taught in local schools.
- summer school programs.
- after-school study and instruction.
- mobile education programs, "rolling reader," etc.

The part that the regional board (or whatever administrative authority is formed to administer these programs) will play in actually carrying them out can vary. It may provide only administrative and co-ordinative assistance in managing these efforts, or it may wish to develop and staff the programs but allow them to be carried on in schools throughout the region, or it may prefer to develop, staff, and house the programs in their own facilities.

Whether central facilities have to be built to house such programs is, then, up to the individual area. At this point regional educational efforts are conducted on a fairly dispersed basis; whether or not we should centralize them will require more study and thought.

Services

The second major area of concern is that of providing services on a regional level. Just what an educational service is is a hard question to answer, and perhaps a list of samples is the best way to make the point:*

- provision of resource staff and consultants in discipline areas.
- provision of resource staff and consultants in non-instructional areas (school management, plant operation, cafteria, etc.).
- curriculum development projects.
- production of instructional aids and media.
- central collection of materials and equipment for borrowing.
- research activities in all phases of education, instruction, management, etc.
- central professional library.
- in-service training programs.
- pupil personnel services.
- data processing services
- central ordering and processing of materials, library books, aids and media, etc.
- legal and fiscal advisory services.

While there may be some serious questions about the undertaking of many educational programs on the regional level, there are far fewer reservations aout services. Since these are more or less ancilliary to the teaching process and are designed to support it in every way possible, it makes sense to provide them in a way to bring about comprehensiveness, quality, and economy.

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* A much more complete list is furnished in Chapter 7.

II

THE REGIONAL SERVICE CENTER

PART II

3

THE NATURE OF THE CENTER

chapter 3

Selecting the Services Approach

After briefly considering the range of programs and services that can be provided on a regional basis, it becomes necessary to narrow our emphasis. From the title of the report, it is obvious that this emphasis will be placed on the regional approach to services.

This is not intended to belittle the emphasis the regional board should place on programs; they will undoubtedly be a large part of its responsibility. There are, however, several advantages of zeroing in on the services approach:

- there will be a pressing need to provide these services, and doing so will require schools and other organizations to take positive and far-reaching steps. Programs, on the other hand, can be and often are implemented on the regional level without a great deal of fuss, reorganizing, or building.

- as was mentioned in the last chapter, there are likely to be serious questions about the feasibility of implementing certain programs on the regional level. the author has chosen not to get into these disputes.

- services do have definite implications for facilities, where the range of programs that can be offered, and their various variations and shadings from region to region make concrete statements about facilities to house them almost impossible.

- choosing just one approach instead of a combination of the two allows the author to make definite statements, avoiding the need for a whole series of modifiers and "maybes."

- narrowing our approach allows us to make certain assumptions that cannot be made if all possibilities are considered. For example we can say that, except in chance cases, there will be no students housed in the center. This seemingly harmless declaration has a multitude of effects on facility characteristics.

Correlation of Programs and Services

Even selecting the clear-cut services approach does not mean that there is no room for programs in the center. It can,

- hire administrators for the programs.
- provide consultant and advisory services.
- develop curricula and teaching guides.
- provide instructional aids and media.
- conduct in-service training classes.
- provide facilities for staff conferences.

The service center will not, by its very definition, physically house these programs. From what we will see about "inputs" and "outputs," it is out-of-character for the center to bring in students for classes or activities in its own facilities. It may, however, provide any or all of the above supporting functions.

The Services Provided

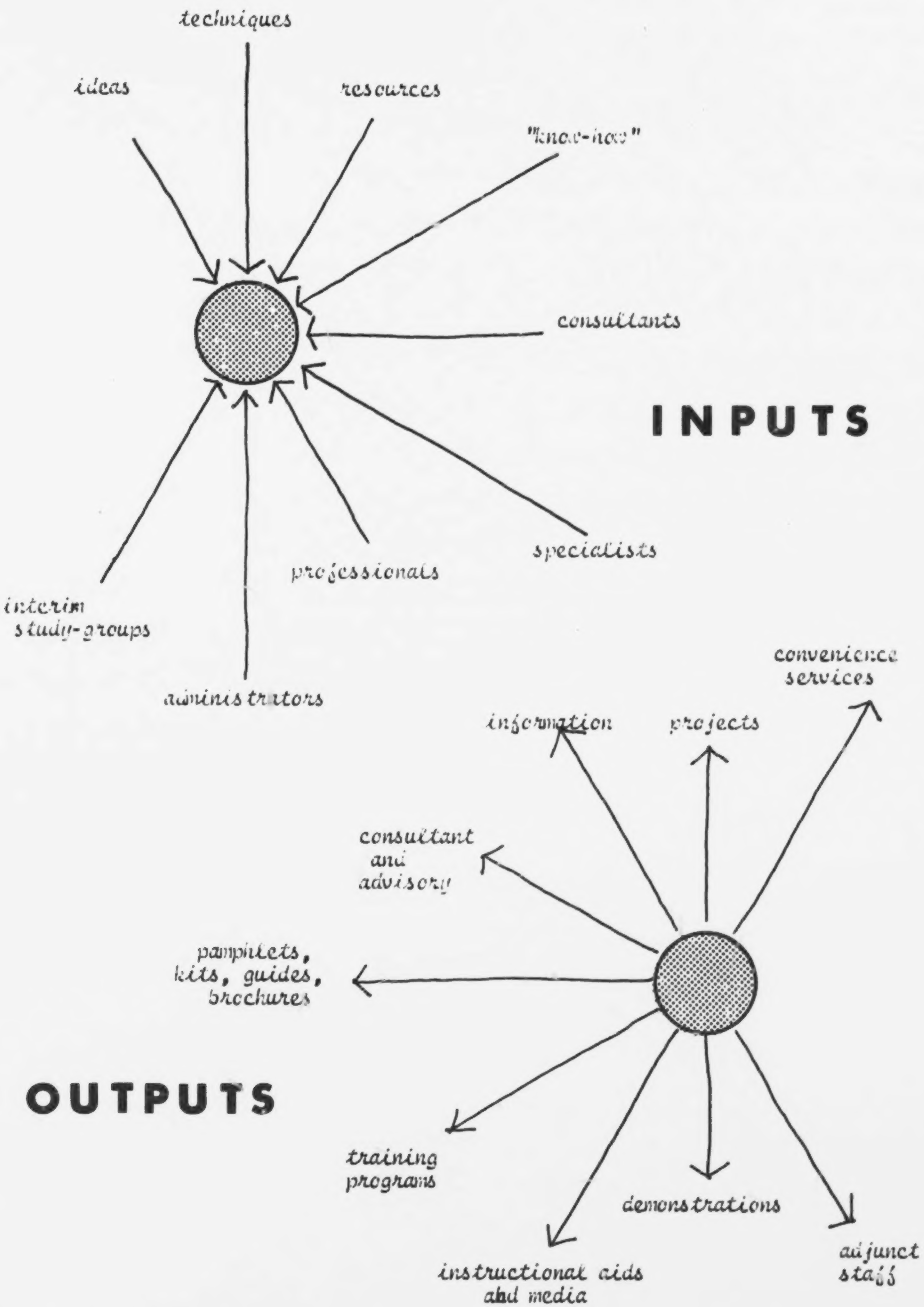
The services provided in the center fall into two categories: those which are being undertaken because member organizations cannot afford them, and those undertaken because member organizations are not equipped to provide them economically.

There is little need to go into these services at this point; they were briefly listed in the last chapter and the reader is advised to turn to Chapter 7 for a more detailed listing.

The Essence of the Center

The role of the service center is a threefold one: after certain inputs (see the diagram on the next page), a mixing process takes place, and certain outputs called services are thrown off. It is not hard to understand the nature of the inputs and outputs, but the mixing process -- the very essence of the center -- needs some explanation.

Providing services on the regional level is based on two goals: one, that the service be provided, and two, that it be provided in the most effective and economical way. A great advantage in consolidating services is the tremendous cross-fertilization that can take place between them


techniques
ideas
resources
"know-how"
consultants
INPUTS
specialists
professionals
interim study-groups
administrators
convenience services
information
projects
consultant and advisory
pamphlets, kits, guides, brochures
OUTPUTS
training programs
demonstrations
adjunct staff
instructional aids and media

in fulfillment of the second goal. This is the mixing process.

The Mixing Process: An Example

An example of this mixing process might be seen when we see how the center might handle a request to develop a new portion of the mathematics curriculum for a member school. The school is not interested in an entirely new approach to mathematics (the center is not prepared to handle this task anyway), but wants to "reshape" its own thinking in the field. The service center could:

- provide the educational leadership necessary to help the member schools "drum up" support for the project from its own ranks.
- provide assistance in any proposal writing that might be necessary or desirable in order to receive funds for the project.
- provide outside consultants and interim staff members to work with the project team.
- provide meeting, assembly and project areas in the building to support the team's project.
- provide a professional library and a wide range of reference materials to support the work of the team.
- provide production services to make instructional aids and media necessary to support the project.

- provide writing and editing services to the staff in order to publish guides to teachers using the project.
- provide in-service training co-ordination and facilities so the project team can explain its concepts to the teachers using them.
- provide dissemination services so the project can be made known to other participants.
- provide staff and resources to follow up the project, to assure adequate testing and evaluation, and to make recommendations for changes, etc.

It is this integrated, co-ordinated, "one-hand-washes-the-other" approach that the center and only the center can give such a project that proves its real value.

A Dominant Role?

While many of the roles that the service center can play in the region will be discussed in Chapter 6, there is one important point to make at this time: the regional center would only take on projects of any size at the request of one or more of its participants. It is this "we-ask-and-you-do" concept that keeps the center going; once it moves from the areas of services and advice into the field of edicts and domination, its role as a service organization is destroyed.

Nor would the center attempt to force projects it has undertaken for one member on all members. Even though dissemination of these projects is one of its prime functions, it must be careful not to force these efforts on all participants.

The Participants

There was a time when schoolmen considered regional efforts as intruments to improve only the positions of their schools. While this is still largely true, the concern that Title III shows about bringing in other participants is evidence of the growing feeling that the service center should not limit itself to schools and school districts.* People are asking -- and not without basis -- what essential difference is there between a school library and a public library, or a college library, or a church library, or a museum library? Why shouldn't a centralized processing system for one be more effective if extended to all?

---

* Section 304.(a). of Title III (Public Law 89-10) reads that "A grant under this title . . may be made to a local educational agency or agencies, but only if there is satisfactory assurance that in the planning of that program there has been, and in the establishing and carrying out of that program there will be, participation of persons broadly representative of the cultural and educational resources of the area to be served."

It seems logical that, for some very practical reasons, the first regional service centers will concentrate their efforts in servicing schools. The great need is in this area, and the problems of bringing together many different types of participants are great (see chapter 5). There is no reason why, however, the regional board cannot bring as many of these participants as possible into the planning process. In this way their needs will be known beforehand, and provision for meeting them can be discussed early in the game. While it may not be so terribly important to "design in" every possible organization, it is very important not to "design out" a possible future participant.

A list of types of participants, both now and in the future, might include:

PRIMARILY EDUCATIONAL

- public schools
- private and parochial schools
- nursery and day-care schools
- private colleges
- community colleges
- public colleges
- adult and evening schools
- correspondence and home-study schools
- co-operative boards (BOCES, etc.)

COMMUNICATIONS

- educational television councils
- commercial radio and TV stations
- communications associations

LIBRARY

- public libraries
- libraries in all school types
- university and professional libraries
- inter-library associations

CULTURAL

- museums and exhibit associations
- historical societies
- theatre and drama groups
- music organizations
- zoos, biological societies, etc.

PUBLIC AND MUNICIPAL

- government bodies, boards, associations
- correctional institutions
- social and welfare agencies
- hospitals
- public health agencies

BUSINESS AND PROFESSIONAL

- industrial education units
- industrial research units
- labor associations
- professional societies

PART II 4 THE REGION SERVED

chapter 4

Regions in General

Up to this point, a great deal of emphasis has been placed on the regional nature of the service center. Except to imply that it is larger than a single district and smaller than an entire state, we have given no real details about this "region."

City planners, for example, are always speaking of regions; some have termed them "areas which act together"; a publication of the New York State Office for Regional Development has the region "a co-ordinated area depending on geography but usually including at least one metropolitan area."* In general, we might make these points about regions:

- There are many different factors that go into determining what a region can be.

- Of these factors, none are universal and none are absolute. what are important considerations in one area may "hold no water" in another.

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* Change, Challenge, Response: A Development Policy for New York State, Office for Regional Development, Albany, 1964.

- Certain beginning goals must be established before factors determining regions can be listed. The most important is size: are we speaking of regions as large as continents, as large as states, or as large as counties? the term "region" is broad enough to include all of these.

- And, what kind of size do we mean? Do we mean number of people, or do we mean area in square miles? This will make a difference: just consider the density of people in New York City against the density in St. Lawrence county. Then measure density against physical size. What considerations would be counted in when determining regional boundaries for service centers in these areas?

We will speak of this size factor in greater detail later in this Chapter; for the present, let us say that we are interested in regions that might contain 250,000 - 500,000 people. Criteria for helping to "determine" regions about this size are given below.

The First Task

A region of any size is a highly speculative and variable thing; there are so many different factors that come into play when one sits down to decide on "areas that work together." Deciding just what their region covers is one one of the first tasks of individuals or boards interested in planning a regional center. This cannot be done in a day or even in a month;

it requires discussion, conference, interview, opinion and just plain thought on the parts of many men. It is a task that cannot be regarded lightly.

The following is a list of some of the factors that often give coherence or diffuseness to a geographic are. It is intended to be general, and specific areas will produce many modifications:

NATURAL CONSIDERATIONS

- mountains and land-forms as barriers
- rivers and valleys as avenues of development
- rivers and bodies of water as barriers
- watersheds
- forestation and vegetation, as it tends to unify or break up an area

POLITICAL CONSIDERATIONS

- existing county, municipal boundaries
- existing municipal government forms and their ability to hold an area together.
- existing taxation consistencies, or lack.
- existing or proposal regional planning
- government centers as focal points
- party affiliations, and political attitudes

SOCIAL CONSIDERATIONS

- "allegiance" of citizens to an area, a city a natural body such as a lake, etc.
- large cities as focal points, often generate regions around them
- overall character of area: rural, urban, suburban
- population densities and distribution
- common ethnic, race or religious background
- common population characteristics: age, sex, etc.

- changing population characteristics
- population growths and declines; shifting centers, etc.

ECONOMIC CONSIDERATIONS

- common economic base a regional determinant: common occupation, large industrial concerns as focal points
- types of labor force: skilled, unskilled, professional, etc.
- per capita income and trends
- marketing allegiances
- common economic "area of influence" around a large city or metropolitan area.

HISTORIC CONSIDERATIONS

- common historic base, background, development.
- historic co-operation or lack thereof
- growth trends and their effects.

ACCESS CONSIDERATIONS

- existence or proposed existence of highways linking regions together or splitting them apart.
- common rail, air or water terminals.
- distance factors.

EDUCATIONAL CONSIDERATIONS

- district boundaries
- existing co-operatives and their regions
- uniformity of attitudes
- any standard regions determined by the state in their educational master-planning.

The Size of the Region

The size of the region covered by the service center will require a great deal of discussion. If a prime consideration is providing many services to the grass-roots schools and organizations, it is very important that the region not get overlarge. Yet is is an economic fact of life that most services can be performed more efficiently and more economically if the size of the region is substantial.

Geography will have a lot to do with the size of the region, too. If, for example, a region of 100,000 students was somehow deemed proper, there are areas in New York State that might take in a thousand square miles before that many students could be acculmulated. Here the size of the region will have to decrease in order to keep its staff and visitors within physically-accessible limits. In areas such as this, the board may decide that the region should be limited in geographic area (and hence size) by a 30- or 40-minute maximum drive from any corner.

In a large city, acculmulating the "ideal" number of students will be no problem at all, and it may be advisable to increase the numbers of students and teachers covered by the center.

The Variable Region

While a region with determined boundaries may be necessary to elect some kind of regional board and to set up regional services, there is no reason why this region must always remain intact. Some services may operate best when covering a number of such regions, while others would be most effective if confined to units smaller than regions. We might call the first type of service "broad-based" and the latter type "narrow-based."

A "broad-based" service might be resource ordering and processing. This operation includes a professional staff and some expensive machinery (if it is to be done on any scale), but not the personal attendance of librarians in the field, or even the resources themselves. To the librarians, the processing center could be a thousand miles away if communications could be effectively maintained over that distance. In fact, the processing operation might become even more economical as it covers more schools and organizations.

A "middle-based" service, that which is best provided on the regional level, might be the curriculum resource center. This facility is only significant if teachers can come in and see its collection of resources, play with its collection of equipment, and talk with its resource specialists. If the region covered is too large or broad-based, the center has little meaning for teachers will not find it convenient to travel there. An individual district, however, can rarely afford the staff and resources to operate such a center. This service and many others like it (explored in chapters 7 and 8) are best provided on the regional or middle-based level.

Finally, an example or a narrow-based service which is best provided in a school or in a district, might be a visuals production center. Teachers can use this facility daily to produce such aids as transperencies, slides, and less sophisticated charts and posters. While work of a more extensive or refined nature is best done on a regional level, this small in-school center can be very handy for everyday use.

The next page gives some breakdowns of services, using these three categories as bases.

PRODUCTION SERVICES AND THE "VARIABLE REGION" : AN EXAMPLE

Super-Regional Level (Broad-based)	Regional Level (middle-based)	Local Level (narrow-based)
- production research - designs of new materials and methods - writing of equipment specifications for manufacturers to use - research into media based systems and systems approaches - dissemination of information on new materials, methods - production of motion pictures - large-scale television productions - central lithographing and other more expensive reproduction methods	- production research - dissemination of information to the local schools - experiments - in-service programs in production of materials - equipment pool - spec writing for local schools - equipment and materials advisory - demonstrations - production of film shorts and single-concept material - TV station - distribution of TV tapes - complete photographic and processing services - graphics unit - publications and central duplicating	- experiments in production methods materials and equipment - equipment pool - informal filming - dark rooms - local visuals production unit for charts, posters transperencies - reproduction machinery for inexpensive processes

SOME OTHER SERVICES THAT MIGHT BE ON THE BROAD-BASED LEVEL:

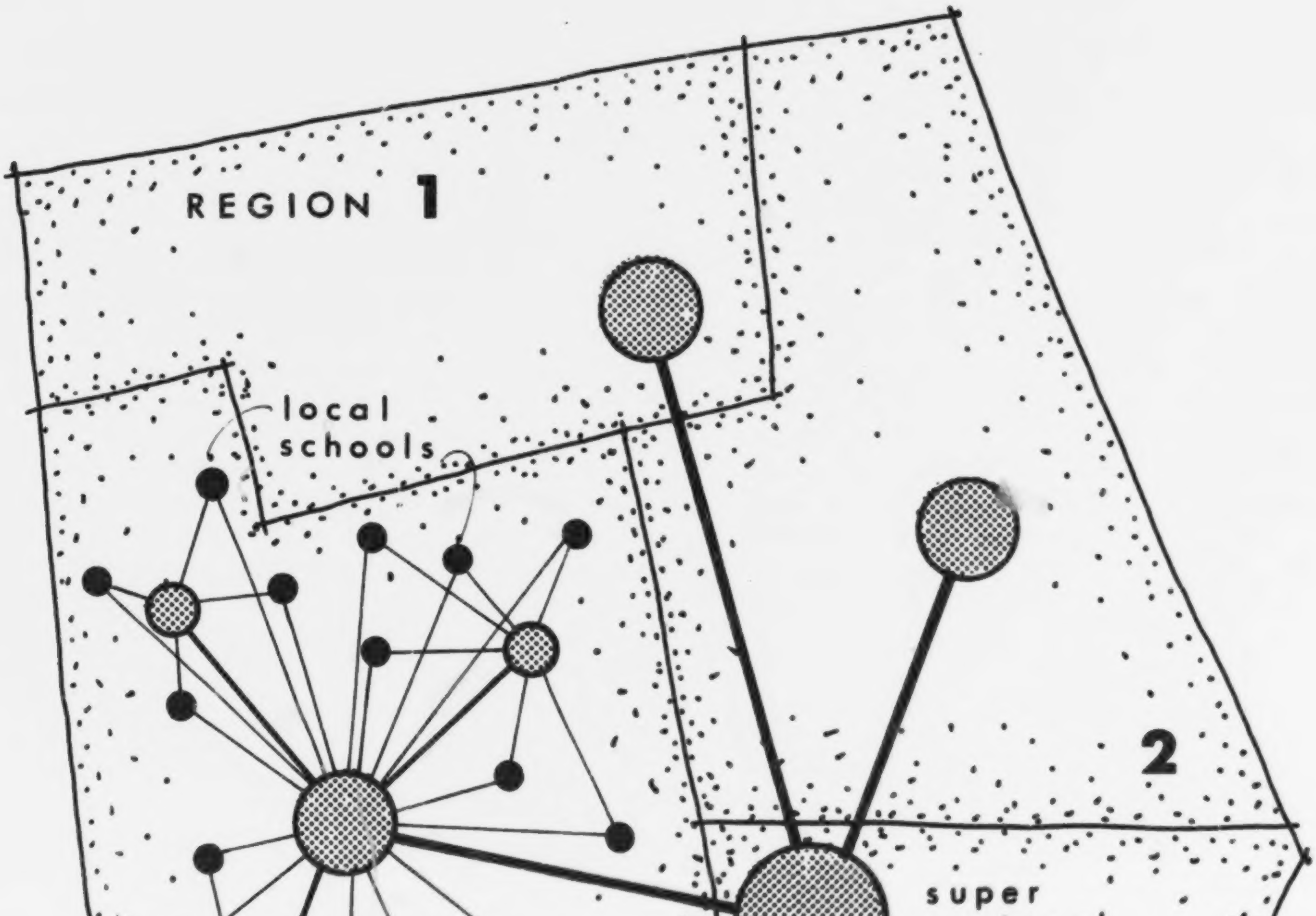
- information retrieval
- central processing of resources
- union catalog & bibliographic
- large curriculum reorganization, study groups, etc.
- development of curriculum resources for wide distribution
- major pupil personnel research
- college-affiliated training and refresher programs
- regional administrative conclaves and work sessions
- developing programs, models & overal computer systems

SOME OTHER SERVICES THAT MIGHT BE ON THE NARROW-BASED LEVEL:

- small professional library
- common resource examination
- central collection of common-use resources
- small curriculum projects
- testing and evaluation of curriculum projects
- pupil guidance services
- student-teacher co-ordination
- training workshops
- district conclaves and work sessions
- local processing of routine data, key-punch and readout

Regional Networks

All of this discussion on variable regions may well lead to a chain or network of regional centers. While a great many services might be provided on the regional level, there may be "super-regional" centers to provide many of the broad-based services, and regional "sub-centers" serving only a district or two, providing more narrow-based services. A diagram of this concept is shown on page 28 and the idea is further explored in Chapter 9.


REGION 1
local schools
2
super regional center
3
regional sub-center
regional center
4

A REGIONAL NETWORK

PART II 5 IMPLEMENTING THE CENTER

chapter 5

A Gap Between Theory and Practice

When one speaks of ideal regional centers with many participants and providing many services, it is an unfortunate but accurate fact that there may be a wide gap between theory and practice. The concept of getting many organizations together for the common betterment is an admirable goal, but one not easily attained.

This is not intended in any way to discourage those working to effect regional developments; as has been said before, the author believes that the clear logic of the regional approach is undeniable. This chapter merely hopes to point up some of the problems that must be faced as the regional approach moves toward implementation. Many of these problems are already on the way to solution; others can be solved on a general level, but must be worked out in individual cases. It will be only a matter of time and effort before all are substantially solved.

Most of the questions stem from the fact that regional provision of services on any real scale is a relatively new thing (meaning that legal and administrative structures are not prepared to accommodate it), and that the regional approach means co-operation among several organizations, each with different structures, and widely varying goals and interests. These questions include:

1 : Regional enthusiasm and support
2 : Bringing together the participants
3 : Creating an administrative authority
4 : Funding and support
5 : Continuity of services
6 : Breadth of operation
7 : State participation in regional efforts

PROBLEM 1 : REGIONAL ENTHUSIASM AND SUPPORT

The "Human" Factor

Ignoring for a moment the problems posed by putting the necessary legal machinery in motion to implement a regional center, there is one great "human" factor to be considered. All the legal support in the world will do little good if this factor is not first considered.

Once the impetus -- no matter what its source -- is provided in an area for some regional effort, it will not take too much time before the top-level administrators and staff members proclaim at least token support for the project. Seeing the virtues of comprehensiveness, quality and economy, these men will line up behind the project and provide support to carry it farther.

What is suggested, however, is that once these men begin to take on the task of drumming-up support from their own ranks, and begin to consider bringing in "outside" participants, the going will get rougher. The great administrative virtues -- excellence and economy -- hold less water with personnel farther on down the ladder; they have to be convinced that the regional approach is also beneficial to the students and their education.

Accomplishing this task may take more time than an impatient administrator may be willing to give, but it is imperative that the time be spent. When determining the boundaries of the region to be served, the proposers of the project would do well to begin an "attitude survey" -- formal or informal; that they embark on a conscientious program to "plant the seeds" for local support of the project. If teachers will not use the building and its services, if its work goes unheeded and unappreciated, if its very existence is continuously challenged by the public it is designed to serve, the project many not only produce hard feelings and long-lasting prejudices, but the "grand plan" may end up safely in someone's trash basket.

PROBLEM 2 : BRINGING TOGETHER THE PARTICIPANTS

The Essential Differences

Chapter 3 listed the various types of participants that might be included in planning the regional center; what it did not say was that bringing together these organizations might become a major operation, particularly if badly handled from the start.

Making the broad (and often unwarranted) assumption that these organizations truly plan to support the center and its functions, there may still be legal roadblocks to hurdle before they can work together. Different organizations with different goals, different administrative setups and different financial structures are hard to legally amalgamate, even to provide a common service to both. One only has to look at the public, tax-supported school district, and then at the privately-endowed college to realize that their whole structures are totally different. Even though their goals may coincide, little else does. Even bringing together the public organizations (say, a public school and a unit of the State University) to co-operatively finance and administrate any project is a major task.

The problems, then, are legal ones. This does not mean that they are easily overcome. Changing laws may only require a majority vote, but changing the spirit behind the laws is often a different story. The various organizations involved will have to get together and seek solutions to these problems, pushing for legislative action where necessary.

PROBLEM 3 : CREATING AN ADMINISTRATIVE AUTHORITY

The Regional Board

Just how the participants in a regional approach can get together and provide an administrative body which reflects equitable participation for all is still another problem. This regional board, or whatever it may be called, will somehow have to represent the interests of each of the participants; it will have to have the authority to control its members; and it will have to have the power to float bonds and hire staff. All are tall orders.

Since the public schools will have a major interest in regional approaches, where does this regional board fit into their structure? How does it relate to BOCES and other co-ops? Where does the regional superintendent and his supervisory district fit in? How does it expect to relate to regional research and development programs, university committees, and school study councils?

How large should the regional board be? How are members chosen, and how long do they serve? What is its role in running the regional program, an active or advisory one? What staff members should it appoint, and which should be directly responsible to it? What kind of tenure requirements should be set up?

How will the regional programs be organized? What kinds of "departments" will there be? Will the regional center be a central facility or an organization of scattered facilities? Who should staff the departments, and how much of the staff should be recruited from outside the region? These and countless other details will have to be worked out.

Once again we are compelled to mention that these are not entirely legal problems; attitudes, fears of big-city domination, and political pressures are all very real forces.

PROBLEM 4 : FUNDING AND SUPPORT

Getting Started and Keeping Going

There are two aspects to funding and support: the initial burst, and the steady flow needed to continue. While there may be government funds (from Title III and other sources) to fund initial projects, the task of developing funds from within the region and from without (from the state, the private foundations, etc), will be an important one. Once the center is in operation, the board will have to devise methods for reimbursing the center for its services on some kind of a "you-pay-for-what-you get" basis.

PROBLEM 5 : CONTINUITY OF SERVICES

Allowing the Center to Plan for the Future

A problem which constantly plagues many public school co-operatives is continuity; BOCES services must be renewed from year to year, and this vagueness about the future often interferes with any real planning on the board's part. One school's pulling out may mean cancellation of an entire program, and the regional center cannot afford this kind of instability. Now only will the regional board have to figure out ways to equitably charge for its services, but it will have to find a way to promote continuity without forcing members to contract for unreasonable time periods.

PROBLEM 6 : BREADTH OF OPERATION

To do -- or not to do?

Another important point is the scope of operations the regional board (1) wants to undertake immediately, and (2) would like to go into ultimately. Where there is a good chance that the board will be financially unable to do all that it wants at the beginning, how far should it go? Will staking small steps lead to such amazing inefficiency that the program might be killed before it gets into high gear?

PROBLEM 7 : STATE PARTICIPATION IN REGIONAL EFFORTS

A Major Role?

A final consideration is the role of the State and its Education Department. How much power should it have in dictating locations, services, staff policies, etc.? while many will argue "none," there are many advantages to be gained from a co-ordinated approach to things. The idea of an educational master plan as a guide to developing the regional centers should not be passed off as a state attempt to take-over this local-based concept. The existence of a master plan can, for instance, see to it that centers are not placed so closely together that they simply duplicate each other's effort.

PART II 6 THE ROLE OF THE CENTER

chapter 6

Many Roles

Once established the regional center can play many roles in the education field; in fact it can assume an importance far beyond that which might be normally associated with a body that specializes only in services to its members. And, what is more important, the center can achieve this status without resorting to force, pressure or otherwise "flexing its muscles"; it is built into the regional approach.

An Educational Focus

Education staff members and teachers in general are a dedicated group, always looking somewhere or to something as a "focus," a place where they can turn their professional alliegiance as it were. Rather than forcing teachers to look toward immediate superiors (who may be shallow), the teachers colleges (who are often behind the times) or to the State Education Department (which is simply too far removed from the local scene), the center should be both good enough and local enough to fulfill this function.

This is not to suggest that the regional center is an ideal focal point; it does posses many of the better qualities for one, though. As a place where a teacher can get advice when he requests it, answers when he asks for them, and materials, resources and equipment when he needs them, the center can soon earn his respect as a "producer," a fountainhead of worthwhile information, and a friend. As a place where curriculum is continually subjected to inspection and change, where interested people are discovering new ideas and new applications, the center can later earn the teacher's respect as a pioneer, as something to which a real alliegiance can be placed. The teacher in turn can look to the center for inspiration, for guidance, and for help when problems arise. When this has happened, the center has become a true "focus."

Role in the Innovative Process

Another important role the center can play is as a participant in the innovative process. As background for this role, we might look to Brickell's report* and note the three stages of educational innovation:

---

* Brickell, H. M., Organizing New York State For Change, Albany, 1961.

> DESIGN: program design, changing what is known about learning into programs for teaching. Characterized by group studies, unencumbered by time requirements.
>
> EVALUATION: systematic testing of new instructional approaches to find out what they will accomplish under what conditions. Conditions should be controlled and observed. The academic freedom essential to developing good design is destructive of good evaluation.
>
> DISSEMINATION: the process of speading innovations into the schools. Ideal circumstances are the everyday, enenriched and normal environment of the local school.*

Brickell goes on to note that he feels the three processes, while inter-related, are essentially different and should take place under different operating conditions. As a result of his study, he proposes new organizations within the state education system to accommodate innovation.

On this basis, it is suggested that basic program design be carried out on a higher-than-regional level by study groups in universities and by Research and Development Centers, and that the regional center confine its task to modifications and the all-important task of dissemination.

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* Here Brickell gives support to the contention that programs, even demonstration programs, should not be housed in the service center: conditions are too enriched and unnatural to truly convince others that programs will work.

As we begin to explore the possible services the center can perform, it is amazing how many times the word "dissemination" will turn up. As part of the center's mixing process, pointed out in Chapter 3, it can receive ideas and program designs, modify them as necessary, experiment with them, and finally disseminate results, observations and recommendations to members. As it begins to assume this task, the center becomes a vital and integral part of the innovative process.

Finally -- the Center in 19xx

Just what role the service center will play in 19xx is hard to say, but at least one line of thought about education at that date places the service center in a greatly expanded role.

Following his thinking on the educational "node," William Caudill, in a speech before the AASA*, proposed the idea that the schools of 19xx might not look at all like those of today, that they might be scattered all over the place, providing media-based instruction to persons of all ages and interests. With this decentralization of the learning process, Caudill further proposes a large central "service center" to plan all programs, develop curricula, co-ordinate information access, produce and originate all instructional aids and media, and to administrate the entire educational system.

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* Caudill, William W., In Education the Most Important Number is One, Caudill, Rowlett and Scott, Houston, Texas, 1964.

Whether the regional education service center will ever take on this kind of role is not a question that can be answered in 1965. The real point is that it is a possibility -- and a real one at that. The thinking of education as a communication process, and the advances being made in ways to achieve this communication do not make proposals such as this so "far out."

In any event it can be safely predicted that the information and population explosions are not about to abate in any great degree -- and the need fpr regional provision of programs and services will continue to grow in the future.

III

PROGRAMMING THE SERVICE CENTER

PART III 7 PROGRAM OF OPERATIONS

chapter 7

The Region's Needs

The first task that confronts the regional board in planning a regional service center is that of deciding what is going to happen there. This sounds easy, but generations of experience have proven otherwise; it must be a long, careful analysis of the region's needs and the resources available to meet those needs -- both now and in the future.

The first step is a realistic determination of goals: what do we absolutely need? what do we want? what would be "nice" if we can afford it? Against these goals must be pitted the resources available to meet them: what do we have? which of the needs might be better met in another way? what can the service center do that we aren't even thinking of now? Finally, these decisions must be tempered with a time factor: what are the trends? what are we doing today that might be outmoded tomorrow? what kind of time-flexibility do we build into our center?

These are questions thant cannot be answered by a report such as this; they are essentially individual, and they must be dealt with on an individual level. The point is made, though, THEY MUST BE ANSWERED BEFORE ANY REAL PLANNING CAN TAKE PLACE.

The Program of Operations

After the region has committed its needs and its resources available to meet them to paper, it is then ready to formulate a "program of operations." The program attempts to find out:

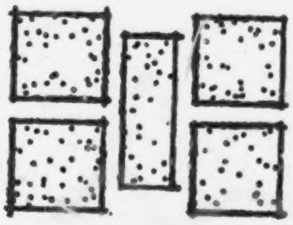
- what functions the center will handle.
- what functions the center may handle in the future.
- what means the center will employ to accomplish these functions.
- what administrative and staff set-up will be attempted to accomplish the functions.

The program of operations presented here is necessarily idealized -- it attempts to encompass as many of the desirable functions of the service center as possible. It will be used as the basis for presenting the various components of the center in the next chapter.

Organization of the Center

It was mentioned above that the regional board must not only consider the needs and the resources, it must also consider the administrative and staff organizations necessary to meet the needs. Arriving at these patterns is a process thant can go on concurrently with that setting up the program of operations.

The hypothetical service center, upon which the presentation of the components is based, is organized into four major areas or departments:



RESOURCE SERVICES
PRODUCTION SERVICES
CURRICULUM SERVICES
ADMINISTRATIVE SERVICES

Each of these Departments is headed by a Department Co-ordinators, and each is subdivided into a number of Divisions which carry out the actual operations. For the purpose of presenting components for an entire center, a fifth area of General (or Supporting) Functions is added in Chapter 8.

The following pages outline the organization of the center, present functions that each division may carry out, and note the applicable components for each. In order to avoid senseless duplication, the actual details of operating each component are reserved until its presentation in Chapter 8.

- department office
- field services division
- information services division
- acquisitions division
- central collections division

resource

- department office
- curriculum development division
- curriculum resource division
- special services division
- pupil personnel division
- training division

curriculum

- department office
- production research division
- origination division
- graphics division
- publications division

production

- department office
- advisory services division
- personnel division
- purchasing division
- data processing division

administrative

resource services

department office (component R-1)

- co-ordination and control of the department.
- receives visitors to the department.
- handles "public relations" and liaision with other departments and throughout the region.

field services division (component R-1)

- handles Center-field relations.
- attempts to eliminate waste and duplication by effective Center-field relations.
- gives advice and assistance where needed.
- co-ordinates library in-service programs.

information services division (components R-2, R-3)

- large professional resource library, either for public use or for access by telephone and mail. Includes a large collection of books, pamphlets, large subscription list to periodicals, depth collections of resources in certain fields, and possibly a collection of rarely used and expensive books.
- information search services providing requestors with desired information and/or bibliographies.
- copy and reproduction services.
- rapid facsimile transmission.
- union catalog of library holdings, both in the Center and in the field.
- periodic print-out of holdings for teachers and staff in the region.
- dissemination of information on new resources.
- documentation services, and dissemination of any iformation gleaned from resources which might be valuable to teachers and staff in the region.
- dissemination of copied "tables of contents" pages to staff members to help them keep up.
- possibilities of future total information retrieval and storage.

acquisitions division (component R-4)

- central examination area for books, aids, etc.
- central receipt of requisitions for aids and resources from member organizations
- central bookkeeping and ordering services.

- central processing and cataloging of incoming resources, both for the Center and for member organizations.

central collections division (component R-5)

- provision of a large central collection of resources, aids and media which remain property of the Center but which are made available for interim use to member organizations:
  - motion pictures and film cartridges
  - slides and transperencies
  - tapes, video tapes, kinescopes
  - science specimens
  - charts, graphs, posters, etc.
  - models and miniaturized teaching aids
  - teaching machines and programmed media
  - equipment too expensive for individual ownership
  - special teaching equipment
- "over-the-counter" pick-up service available.
- daily pick-up and delivery services.

production services

department office (component P-1)

- co-ordination and control of the various divisions.
- receives visitors to the department.
- handles "public relations" and liaision with other departments and throughout the region.

production research division (component P-2)

- research activities, evaluations, dissemination of information and demonstration of new methods, new materials, new equipment.
- co-ordination of production in-service programs.
- advisory services on selection and care of equipment.
- modification work on equipment to meet special needs.

origination division (components P-3, P-4, P-5)

- initiates and co-ordinates the various TV and film production in the Center.

- origination of television programs, both live and pre-recorded for regional use.
- taping and relaying of "off-the-air" programs.
- co-ordination of origination from remote points.
- provision of studio and broadcasting facilities (possibly for an all-day ETV station).
- origination of motion pictures, single-concept films, "shorts," etc. for regional distribution.
- photographic work for all divisions.
- photographic processing work for all divisions.

graphics division (component P-6)

- production of all kinds of graphic and visual materials for requestors.
- custom-made graphics, or modification of commercially-available visual materials.
- in-service programs for graphics production, allowing for some transfer of this task to the individual school or organization.

publications division (components P-7, P-8)

- writing and editing of books, pamphlets, guides, and other written materials for the Center, for the curriculum committees and other requestors.
- central printing facilities, both for this division and for all others.

curriculum services

department office (component C-1)

- co-ordination and control of the various divisions.
- receives visitors to the department.
- handles "public relations" and liaision with other departments and throughout the region.

curriculum development division (component C-2)

- initiates and co-ordinates curriculum development projects requested by member organizations.
- brings in staff and provides facilities for interim development teams.

- disseminates curriculum development results to other member organizations.
- co-ordinates the development teams with supporting functions (graphics production, publications, etc.)

curriculum resource division (component C-3)

- provides resource and adjunct staff members to aid in the various discipline areas in the field.
- provides conference, browsing, work, project and remedial facilities for area teachers.
- provides in-one-place collections of kits and guides in particular discipline areas.

special services division (component C-4)

- provides resource and adjunct staff members in non-academic areas such as health, cafeteria, adult education, home and family living, etc.
- co-ordinates and provides administrative staff for special regional programs for the mentally-retarded, culturally-deprived, gifted, drop-outs, physically-handicapped, and the like.

pupil personnel services division (component C-5)

- provides co-ordinative services in pupil personnel areas such as guidance, psychological, testing, etc.
- census and attendance statistical analyses.
- co-ordination of testing and evaluation studies goining on through the Center or in the field.

demonstration and training (component C-6)

- co-ordination of all in-service training programs.
- demonstration facilities for use and exhibit.
- co-ordination of novice-teacher and student-teacher programs.

administrative services

department office (component A-1)

- co-ordination and control of the various divisions.
- receives visitors to the department.
- handles "public relations" and liaision with other departments and throughout the region.
- handles liaision with Regional Administration.

advisory services division (component A-2)

- advisory services to administrators, business managers, board presidents, etc. in many different areas such as legal, fiscal, transportation, maintenance, etc.
- co-ordinates the filling-out of various state forms.
- central budget audit and control.

personnel division (component A-3)

- central record of applications for positions, both at the center and in the field.
- possibility of central interviewing.
- possibility of central writing of job specifications, advertisement for positions, recruiting, etc.

purchasing division (component A-4)

- central writing of bids and specifications for some supplies, materails, and services.
- central advertising and bidding for these commodities.
- central processing and accounting for purchasing and inventory in many fields.

data processing division (component A-5)

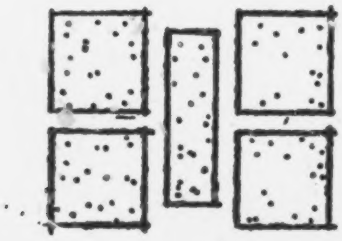
- central processing of data, statistics, records, in many different areas.
- provision of computer facilities for library, pupil personnel services and othe divisions requiring this service.

PART III 8 COMPONENTS OF THE CENTER

chapter 8

A Further Division

As the program of operations was presented in the preceding chapter, the functions that the service center can perform were divided into five areas:



RESOURCE SERVICES
PRODUCTION SERVICES
CURRICULUM SERVICES
ADMINISTRATIVE SERVICES
GENERAL

The next step in planning the service center is that of breaking down each of the five areas into a series of components, many or all of which can be forged together to meet an individual regions needs.

The "Ideal" Component

By its nature, a component is a piece, a part, a cell which generally carries on a distinct function. If one of the five areas or departments, for instance, plans to provide five distinct service types, there would ideally be five components in that department. Each component, then, has a function, has a title, has a staff, and prepresents a group of facilities. Thirty-two such components have been identified as parts of a service center that would provide all of the services listed in the program of operations. Ideally, the regional board, having determined its own program of operations, would merely have to select those components it needs from the thirty-two.

Some Qualifications

It must be noted at the outset that this components approach is not as clean-cut as it first appears. FIRST, we note that services cannot be so clearly defined that each component represents one and only one service; there are overlapings and shadings everywhere. SECOND, each component cannot exist in a vacuum; some are quite self-sufficient, but most will depend to a great extent on others. THIRD, any attempt just to set selected components side-by-side without considering their influences on one another would be plainly impossible.

The author has attempted to counter these drawbacks to the components approach by being ever mindful of the relationships that exist not only within components, but between them. The last paragraphs of the discussion on each component speaks of its relation to others; after each Department is presented a diagram of the relationships in that department; the schematic study tries to wrap all of the components up in a workable solution. The schematic study uses all the guidelines in Chapters 8 and 9 in finally putting the components together.

Selecting Components

When selecting components for use, it is recommended that the regional board keep the preceding qualifications strongly in mind. They say that a ruthless "yes-and-no" approach is out of the question; they note that there will have to be concessions and departures from the ideal when the components are put together; they say the whole process is not nearly as simple as it looks.

Presenting the Components

In order to give clarity and consistency to the presentation of components, and in order to permit the necessary cross-referencing, these principles have guided their presentation:

- The presentation is divided into five large divisions, each corresponding to a department in the center (Resource, Production, Curriculum, Administrative, General).

- Each large division is in turn broken into its various components.

- Each component is discussed in this format:

  A. Function
  B. Staff
  C. Facilities
  D. General

- Following the discussion of each component, a diagram showing the relationships of the various areas listed under "Facilities" is presented. This diagram is schematic and is not intended to be an architectural solution. Principles used in constructing the diagrams are listed below.

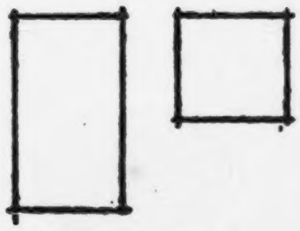
- At the end of each department, there is a diagram presenting overall relationships of the components in the department.

- Chapter 9 presents some final comments on synthesizing the components. The Schematic Study in Chapter 11 puts them together for a specific situation.

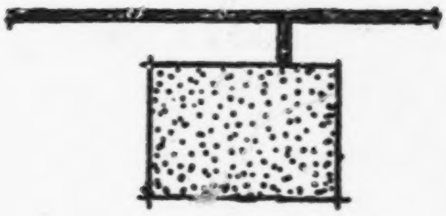
- An index to components is given on page 58.

The Diagrams

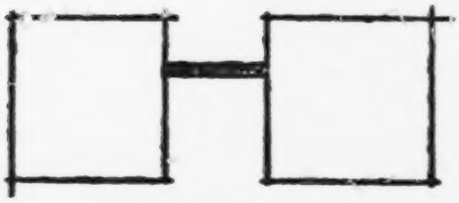
In order to maintain a modicum of consistency, and in order to make the diagrams as readible as possible, these principles guided their preparation:



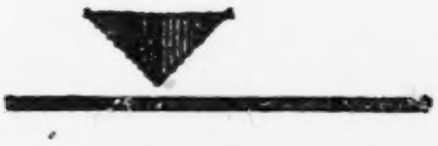
- The individual blocks are roughly sized relative to each other -- that is, larger blocks indicate a need for more floor area than smaller blocks -- but there is no consistent scale used.



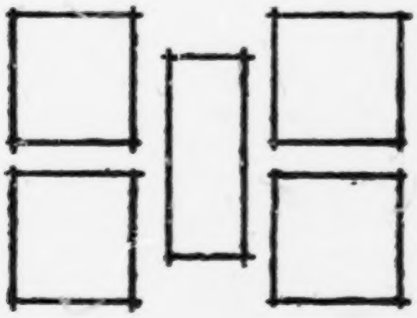
- If there is a "most public" area in a component (for instance a reception space to which people should be naturally attracted once they enter the area) it is stipled or shaded.



- The thick dark lines connecting blocks indicate a need for access between them (corridor, foyer, hall, etc). Sometimes a simple doorway will suffice.



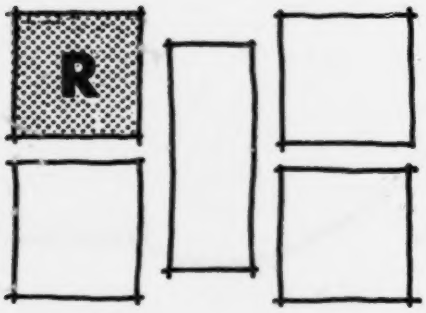
- The grey access arrow is only to orient the viewer; its location does not indicate a specific entry point into the component.



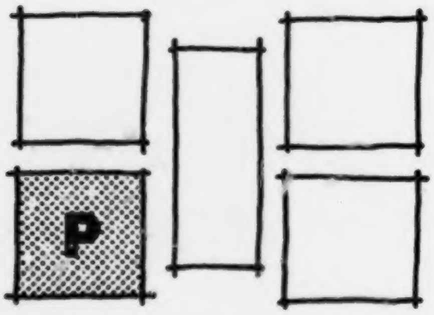
- The total service center is schematically represented by the diagram shown.

KEY

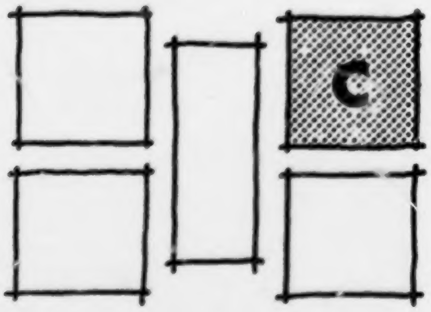
RESOURCE



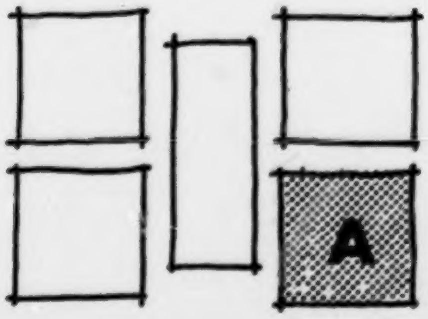
PRODUCTION



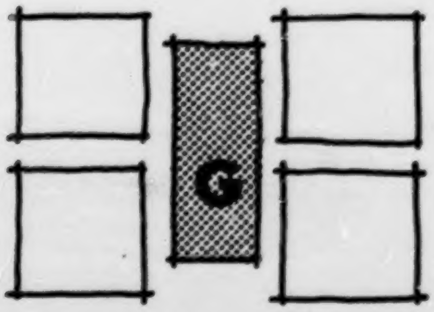
CURRICULUM



ADMINISTRATIVE



GENERAL



KEY

R

R - 1 department office 59
R - 2 professional resource library . . 62
R - 3 search and bibliographic 66
R - 4 acquisitions center 70
R - 5 central collections 73
general relations 78

P

P - 1 department office 79
P - 2 production research 82
P - 3 television origination 85
P - 4 film origination 91
P - 5 photographic and processing . . . 94
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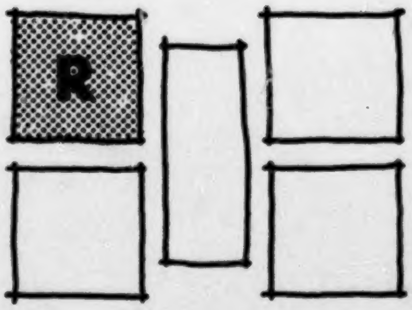
RESOURCE SERVICES



A FUNCTION

This component provides office and conference space for the co-ordinator of the Resource Services Department, and office and work space for the staff of the field services division.

B STAFF

The staffing will, of course, vary according to the make-up of the department. Possibilities might include:

Department Co-ordinator
Assistant Co-ordinators (as necessary)
Clerical Staff

Director, field services division
Field services staff

The co-ordinating staff need not be large, since most of the work will be done in the department's divisions. The fields services staff may be considerably larger, although they will spend much of their time in the field.

C FACILITIES

Reception and Waiting Area

- serves as a reception area for the department office.
- serves as a general information center for those looking for specific persons or places in the department.
- waiting furniture, desk for one receptionist.
- should be the most accessible area in the department.
- a possible "glass front" onto corridor or lobby to accentuate its importance as an information center.

Co-ordinators' Offices

- comfortable and well-appointed.
- directly accessible from reception area; directly or indirectly related to conference and secretarial areas.

Conference Area

- serves the department co-ordinator and field services staff, and if correctly placed, can serve the needs of other offices in the department.
- modular tables suggested for variable arrangements.
- write-on and other tackboard spaces.
- careting a possibility.
- outlets and jacks for different kinds of equipment.
- variable lighting levels suggested.
- accessible from co-ordinators' offices and reception.
- preferably accessible from corridor.

Secretarial and Work

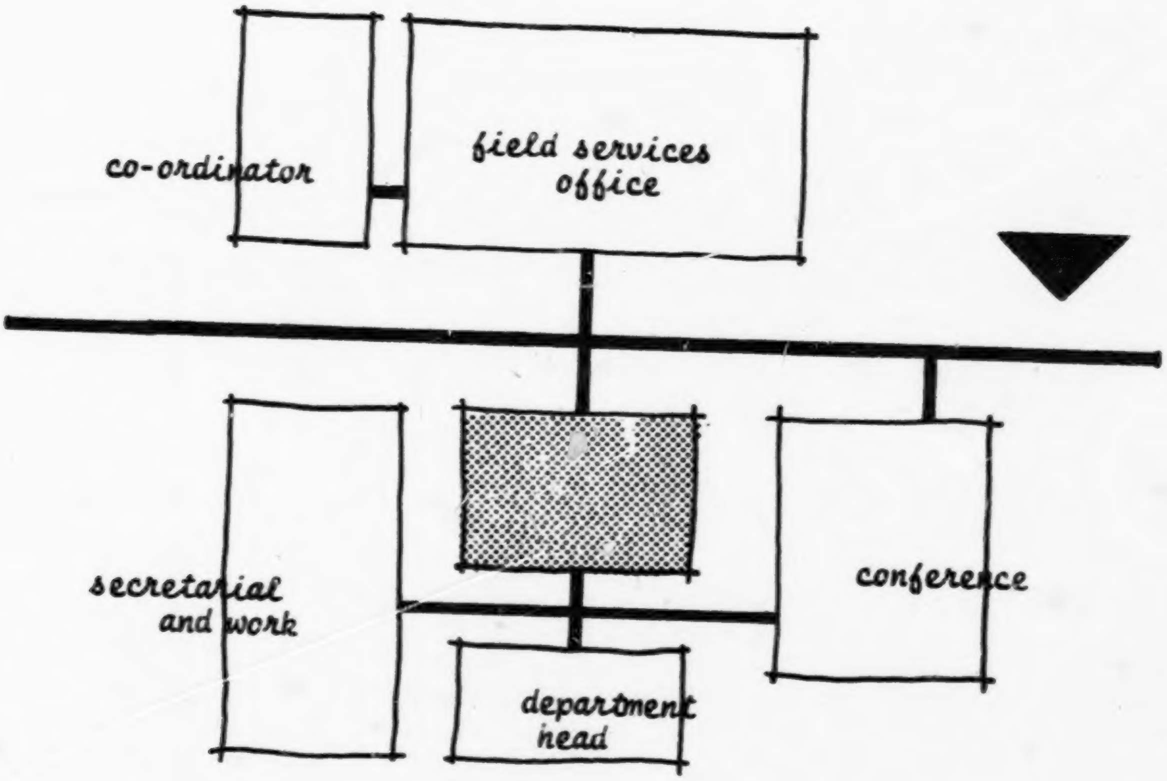
- houses the necessary secretarial and clerical staff.
- cabinents for storage.
- relate directly to reception area; but acuoustical isolation preferred.
- relate indirectly or directly to co-ordinators' offices.
- adjacent work room with counter-top area and outlets for office machines.

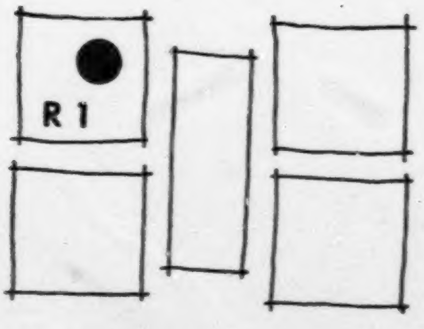
Field Services Office

- a large staff room where staff members may have desks, informal conference, and storage areas.
- need not be directly related to the rest of the component.
- relate to corridor.
- adjacent area for division director suggested.

D GENERAL

As will be the case with each department office, the most important point to be made is the high degree of public use that these components will get. For this reason, it should be located just off the main lobby and on a major circulation path into the department. This allows the component to act as a "gateway" into the department.


co-ordinator
field services office
secretarial and work
conference
department head


R 1

A FUNCTION

The professional resource library can be a many-faceted operation; the role it can play in the regional approach to information access will vary a great deal. While two prime alternatives are presented below, there are many shadings and overlappings:

1 PUBLIC ACCESS: Here the professional library is planned to accommodate visitors and browsers (in much the same way a library now does) with requests for information also handled by mail or phone.

This public access to the library, its reading tables and its stacks demands that it be placed on a major circulation path in the center. Support facilities will include administrative and machine areas; study carrels may be provided for individual use.

2 PROFESSIONAL-ONLY USE: Another approach to the professional resource library is that of making it available to users only by phone or mail. Search and bibliographic work would be done by professionals only, and general public use of the library would be unnecessary. Browsing materials can be placed in individual resource areas.

This type of operation depends heavily on a search and bibliographic component, such as the one presented as R-3. Details of its operation are listed there.

No matter what alternative (or compromise between the two) is selected, the professional resource library can house:

Books, pamphlets, brochures
Large subscription list of periodicals
Instructional aids and media, including slides, sample texts, recordings, etc.

Materials to be circulated on a rotating basis throughout the region, however, are stored in central collections, R-5.

Information Retrieval

With the number of research projects being conducted in its behalf, the day of at least limited information retrieval and storage (IR&S) cannot be too far off. The fragmented and limited nature of development to date, however, makes accurate predictions a hard job. There are serveral points to note:

- While it may be technologically easy to reduce information to miniaturized form, it is not so easy to design a classification system to retrieve it. This above all has slowed development of IR&S.
- When IR&S is implemented on any scale, the very nature of the system demands that information centers housing the storage equipment be set up for regions much larger than we are discussing. Not only are equipment costs high, but a specialist staff must be continuously employed to screen information to be included in the system.

Where all this leaves the professional resource library is hard to say. In any case, information retrieval will not be a daily event for a number of years to come. The professional resource library can undertake projects for retrieval on a limited scale until greater developments come along.

B STAFF

The staffing of this component will vary greatly with the types of services rendered, and the particular approach taken toward the professional resource library. A general organization might include:

Director, information services division
Senior librarian
Information search co-ordinator (second alternative, R-3)
Professional library staff
Clerks and clerical aids

C FACILITIES

Professional Resource Library

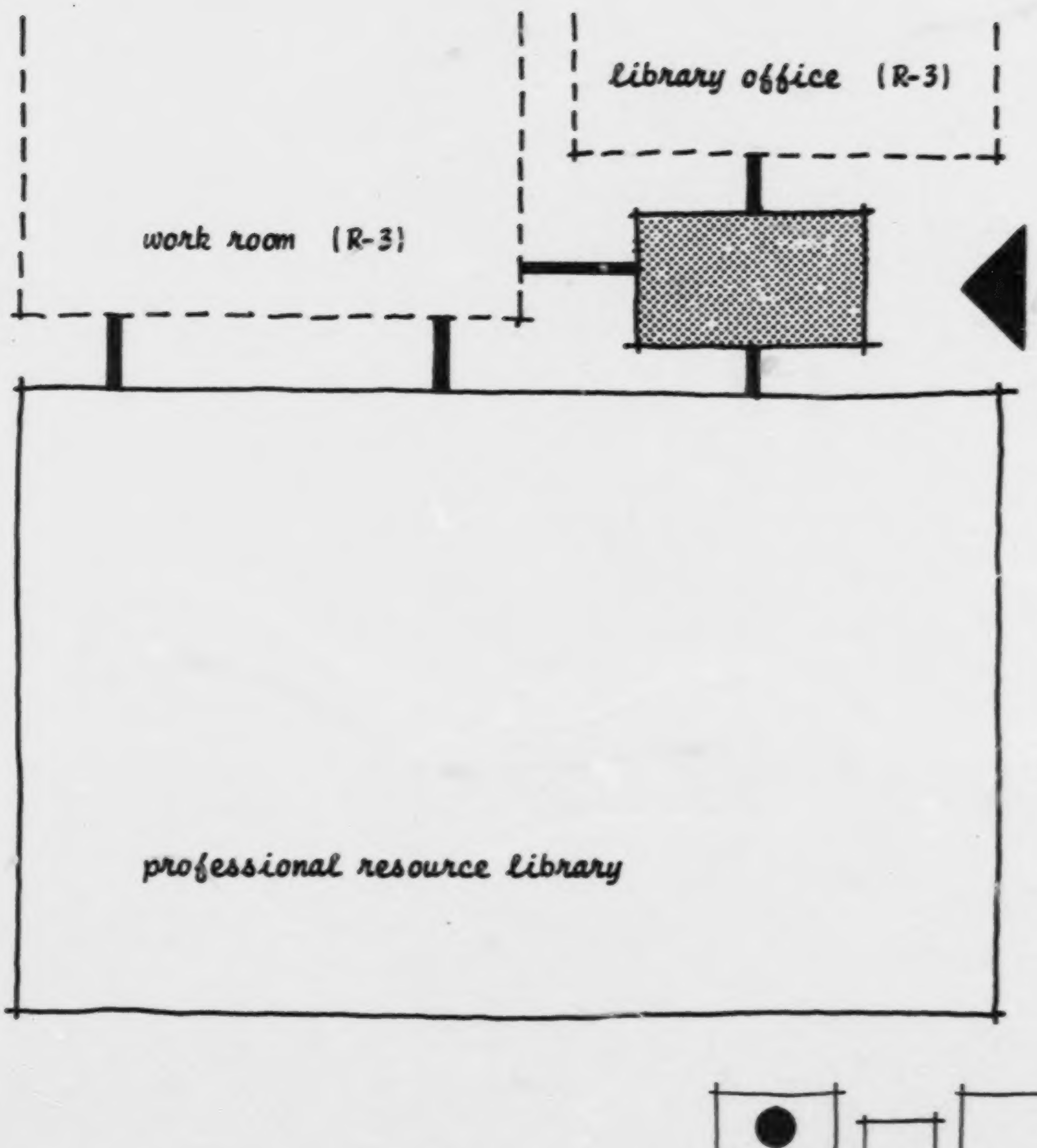
ALTERNATE #1
- a large space for storage, browsing, reading.
- quite reading and research area.
- open periodicals and books stacks.
- acoustical treatment throughout.
- individual study carrels suggested.
- air conditioning suggested.
- adjacent office and work area (see R-3).
- adjacent microfilm storage and reading area.
- relate directly to a major circulation path.

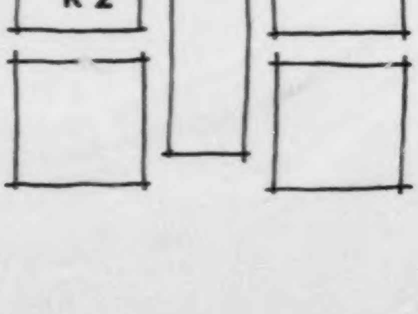
ALTERNATE #2
- large space, primarily for stacks storage, clerk work area.
- open periodical stacks and vertical file area (see R-3).
- construction and cabinent work can be less rugged considering the only-professional use.
- strong tie to component R-3.
- adjacent microfilm storage and reading room.
- public access unimportant; location in building also unimportant.

D GENERAL

Following up on our brief discussion of information retrieval possibilities, this area should be designed as flexibly as possible. A large, long-spanned, open area can serve the best.

professional resource library **R 2**


library office (R-3)
work room (R-3)
professional resource library



A FUNCTION

The Search and Bibliographic unit would be established as an adjunct to the professional resource library (R-2) and could perform these kinds of services:

1 INFORMATION SEARCH: with the information explosion, and with modern man's need to gain access to many different kinds of information, the process of searching for it is becoming a serious problem. More time is being spent in the search than in comprehension of the material. To combat this problem, this component might set up an operation similar to the one proving so successful at the Education Centre Library, Toronto:

- a student or teacher, through his local library, places a request for information on a certain topic. (via telephone or mail).
- the professionals in the unit record the message and, using many book and periodical indexes, prepare a bibliography of information on the topic. This bibliography stays in the center for future use.
- the materials in the bibliography are assembled from books and periodicals in the professional resource library, from resources elsewhere in the center, from materials in member libraries, and from various inter-library loan services.
- the materials are then copied (by Xerox or other equipment) and sent to the requestor. Duplicate copies of materials not in the Center are made and stored in a vertical file for future use.

Once again the center will have to consider the possibilities of information retrieval and storage, and how it might affect the search and bibliographic function in the future.

2 PROFESSIONAL DISSEMINATION: because of the multitude of information,all topics included, the professional finds that he simply cannot keep up with developments in his fields of interest. This unit may be able to help him out.

One approach is that used by the Education Centre Library which each month copies (by Xerox) the Table of Contents page from each periodical it subscribes to; these are bound into pamphlets and distributed to teachers and staff in the area. Staff members can get a quick review of all articles published in the last month, check ones in which they may be interested, and receive copies by return mail.

Another approach might be computer-based, using the computer to match key words in titles of incoming articles to pre-determined key words suggested by staff members as indicative of their interests. Each staff member can receive a computer printout, check off articles, and receive copies by return mail.

3 DOCUMENTATION: the function of this staff can run from basic publication of book lists and bulletins to more extensive efforts such as book reviews, collections of opinion on pertinent issues of the day, and so forth.

4 UNION CATALOG: this unit will be in the position to make a listing of all titles held by the professional resource library, local libraries, and library units throughout the region. A union catalog (and perhaps a computer printout) can be made avilable to advise any requestor where a title can be found. This could go far beyond books, covering magazine articles and instructional aids and media.

B STAFF

The staffing of this division might be considered adjunct to that of the professional resource library (R-2) including,

Director, information services division (R-2)
Co-ordinator, information search
Co-ordinator, documentation
Co-ordinator, cataloging
Professional library staff
Clerks and clerical aids

C FACILITIES

Reception and Secretarial

- small waiting area; secretarial staff for division.
- relate directly to corridor or foyer leading to the information services division (components R-2 & R-3).

Division Director's Office

- serves as office for the director of the information services division which covers both R-2 and R-3.
- relate directly to reception area.

Documentation Staff Room

- a small area to house this co-ordinator and his staff.
- primarily an office; informal conference space within.
- relate directly to reception area.

Work Area

- the hub of the division's activity.
- some of this area must be included with the library R-2 even if no search and bibliographic unit is planned.
- contains tables and desks for clerks, typists, collators, and other library staff.
- contains union catalog.
- storage area on walls for publications, cards, etc.
- grid outlet pattern suggested on the floor to serve the many different kinds of machinery that may be used.
- air conditioning suggested.
- acoustical treatment necessary.
- should relate to Library and reception areas.

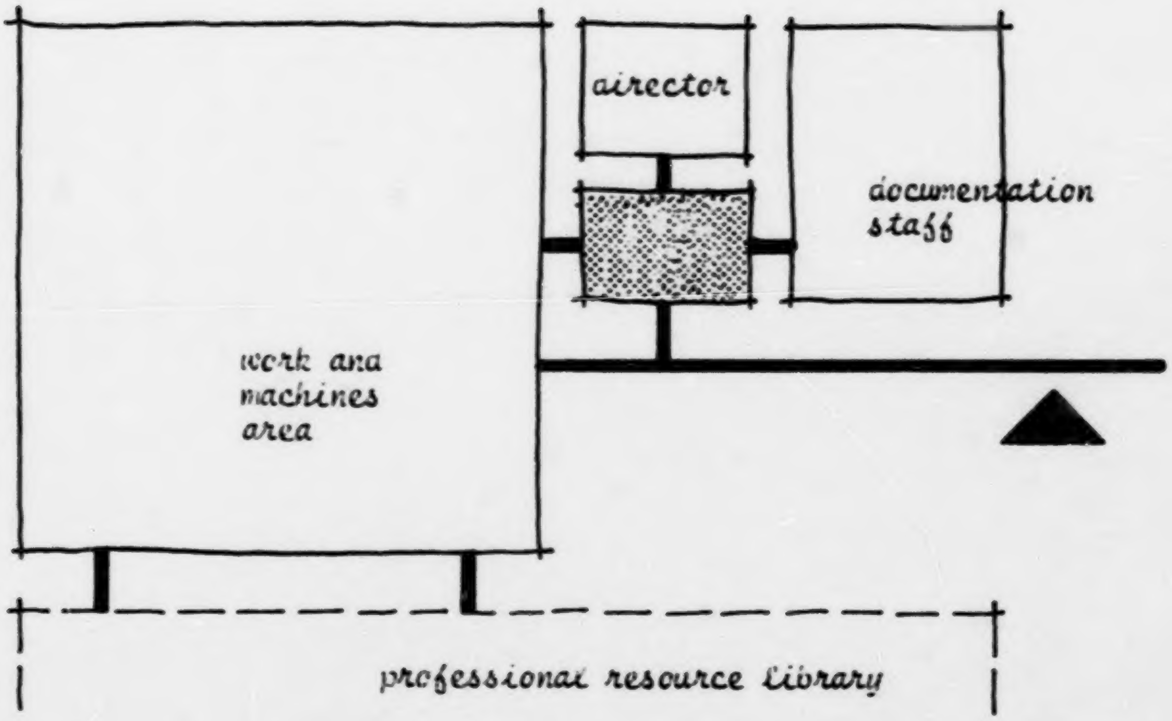
Machine Area

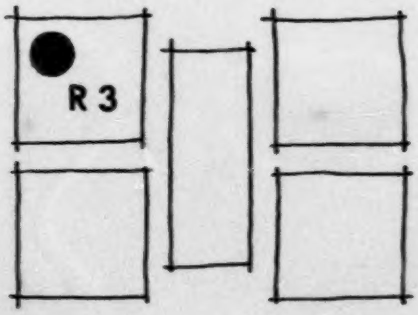
- designed to house copying (Xerox) or relaying (closed-circuit TV or whatever) equipment.
- air conditioning necessary.
- relate to work room and library.

D GENERAL

The size of this unit depends on the range of services offered; the most important area to size (or oversize) is the work area to allow for changing functions. Related components include the professional resource library (R-2) and possibly central collections (R-5).

search and bibliographic **R 3**


director
documentation staff
work and machines area
professional resource library



A FUNCTION

This divsion can house many different kinds of services which relate to the selection and acquisition of resources.

These resources include . . .

books, pamphlets, brochures
magazines, periodicals, serials
kits and guides
transperencies, charts, posters
films, tapes, kinescopes, recordings
programmed instruction media
equipment

The services can include . . .

display area for viewing and trial
collections of recent publications, review copies of work from jobbers and publishers
central ordering office
central bookkeeping and accounting
central processing, making of catalog cards, etc.

The advantages of centralizing acquisition and processing are obvious: not only can the teacher view a wider range of resources and equipment, but the center can employ its computer to aid in the strictly mechanical functions of ordering and processing. The center can also use central processing to aid the bibliographic unit (R-3) to maintain its union catalog.

B STAFF

Staffing for such an operation might include:

Director, acquisitions division
Examination area manager
Ordering manager and clerical staff
Processing manager and clerical staff

C FACILITIES

Examination Area

- a large area designed to house the collection of books, materials and equipment for staff and teacher perusal.
- adjustable shelving on standards should cover most of the wall area.
- generous table top area.
- many outlets, some at counter-top height, suggested.
- some wired carrels for individual use a possibility.
- directly accessible to corridor and acquisitions office.

Preview Room

- used for teacher preview of films, slides, tapes, etc. that may be in the examination room, or ones they have brought with them.
- front and rear-project set-up (not elaborate).
- variable lighting suggested.
- many outlets should be provided.
- directly accessible to examination area.

Acquisitions Office"

- house staff necessary for central ordering and processing of resources.
- an in-person ordering desk should be placed convenient to the doorway leading to the examination area.
- no space need be provided for the resources themselves since they will be directly sent to the requestors by the manufacturers.
- actual lay out will depend on the equipment used.
- relate to examination room and corridor.

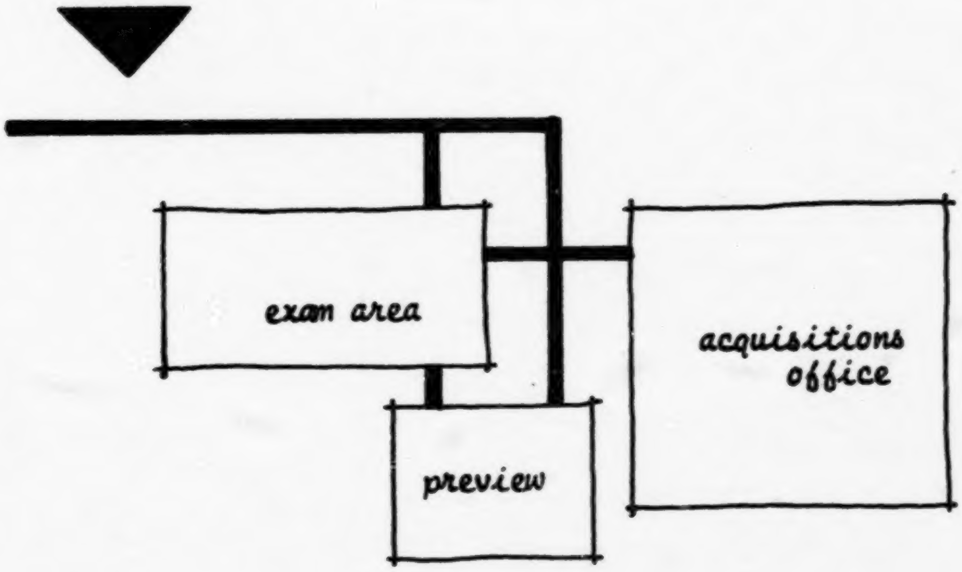
D GENERAL

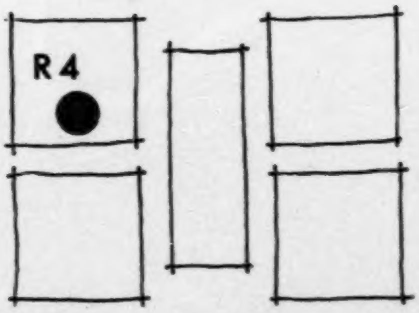
This area should relate fairly directly to a major circulation path in the building so that persons wishing to use the examination area may easily do so. The other components to which it should relate include:

R - 3 Search and Bibliographic

C - 3 Curriculum Resource Center (may be indirect)

A - 5 Data Processing Center (may be indirect)


exam area
acquisitions office
preview


R 4

A FUNCTION

The central collections division can maintain a large collection of instructional materials for circulating use in the region. It is not intended to serve as a central storehouse for materials that individual schools or organizations can purchase for themselves, but as collections of more rarely used, extensive or expensive materials which schools could not easily afford to own.

Resources housed in this facility might include:

motion picture film library
slides, tapes, film loops
programmed instruction devices
kits and 3-D models
transperencies, charts, posters
projection and audio equipment
special screens, portable rear projection stands, etc.
microphones
science specimens, dead and alive
miniaturized teaching aids (computers, logic games,
  miniaturized labs, etc.)
spare modules for audio laboratories
special cameras

The means of request and retrieval of this material should be given some thought. The 1965 approach is probably one of telephone or mail request, with a regular daily delivery and pick-up service to member schools. Teachers can also come directly to the center and make over-the-counter requests for materials and equipment.

As time and technology advance, there is no reason why "projectable" aids such as films, tapes, slides, etc. have to move from their housing place in the center. If this becomes the case, the center might incorporate these materials with those in the professional library (R-2) and make the whole business available to the region on a computerized retrieval basis.

In any case the central collections will probably want to use the center's computer (A-5) to aid with the routine work involved in processing requests for resources.

B STAFF

Staffing might include,

Director, central collections division
Circulation co-ordinator
Shipping and Receiving clerk
Materials inspector(s)
Shipping clerks
Truck Driver(s)
Clerical Staff

C FACILITIES

Circulation Office

- handles written, telephone and personal requests for materials from the center.
- processing, checking and inventory control of materials takes place here.
- should have a counter area facing on a public corridor, preferably related to the acquisitions center.
- some consideration may be given to key punch and readout facilities in this area.
- relate to the rest of the component.

Preview Room

- a small room into which visitors can take requested materials for preview.
- should contain rear projection screen, front screen for overhead projector.
- need not be elaborate, but should contain at least one piece of each type of equipment needed to project materials available from the store room.
- immediately adjacent to circulation office.
- preferably in full view of the circulation office.
- may be shared with the acquisitions center (R-4).

Shipping Office

- houses shipping-receiving clerk and his files.
- large display wall for charts, schedules, inventory control boards, etc.

- glass vision panel to shipping and receiving area.
- easily accessible to circulation office.
- direct connection to shipping and receiving area.

Shipping and Receiving Area

- a large space to accommodate receiving, sorting, storing (on an interim basis), and shipping functions.
- inspection machinery for returned films and projectable materials.
- perhaps a small maintenance area for minor repairs on returned equipment, etc.
- double door access to central collections area, and to a main circulation path in the center.
- adjacent loading area for pick-up and delivery (see description of an area such as this on page 175).

Central Collections Area

- houses the various materials and equipment located in the center.
- should contain vertical film can storage racks for the film library.
- should contain wide shelving for two-dimensional materials. (blueprint-type cabinents).
- should contain large open storage racks for 3-D kits and models.
- should contain aquaria and tubs for storage of science specimens.
- air conditioning and humidity control suggested.
- double-door access to shipping and receiving area.
- easy access to circulation office.

D GENERAL

With the expanding role of instructional materials in and out of the formal classroom, there are good chances that this will be a growth area in the center. The collections area should be oversized to start with, and so located in the building that expansion can be accomplished with minimum effort.

The circulation office is not the kind of area that depends on drawing in customers; people wishing to personally order or preview materials will hopefully know where they are going. For this reason it does not have to be located on the mainstream of circulation flow in the center.

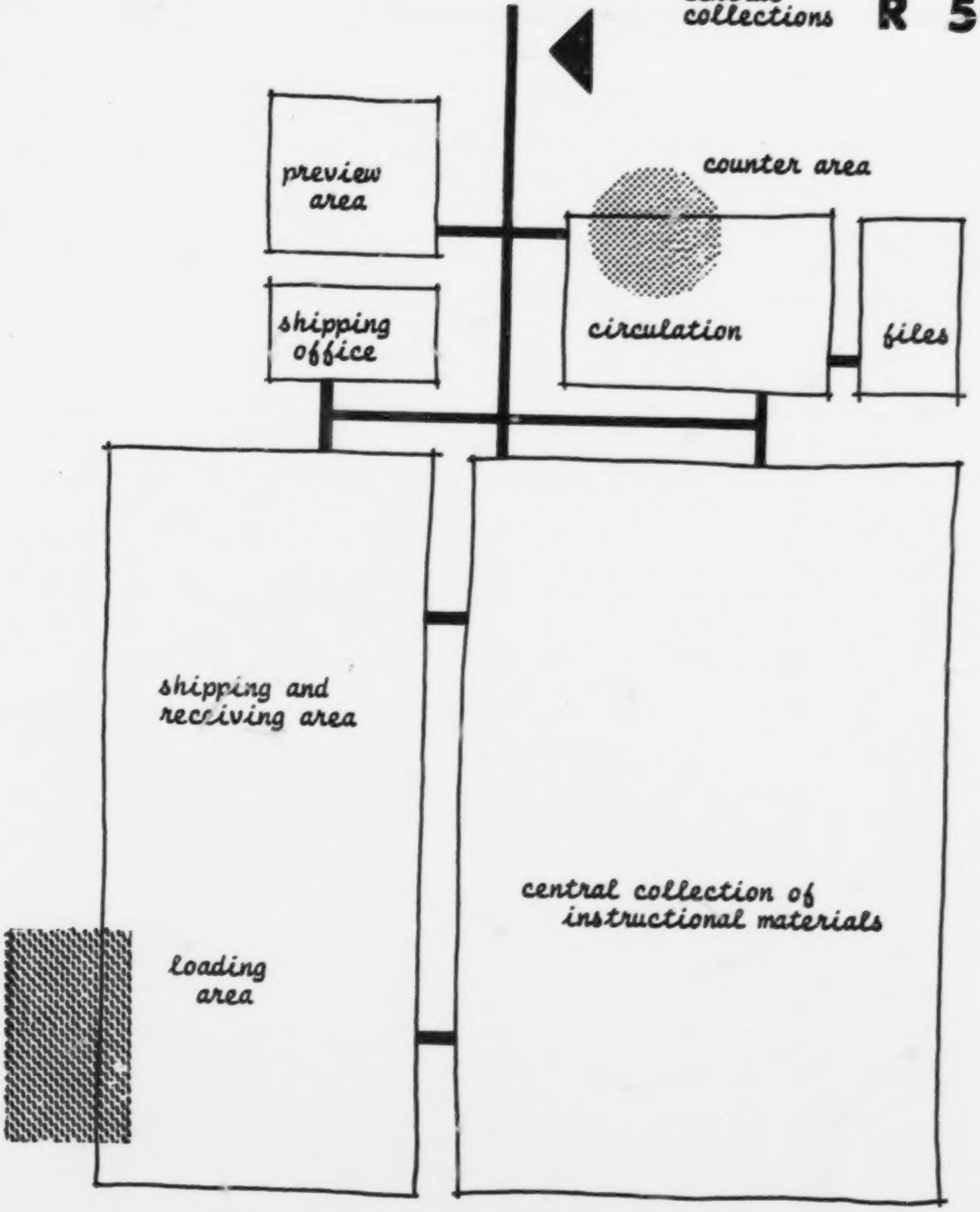
Related components might include:

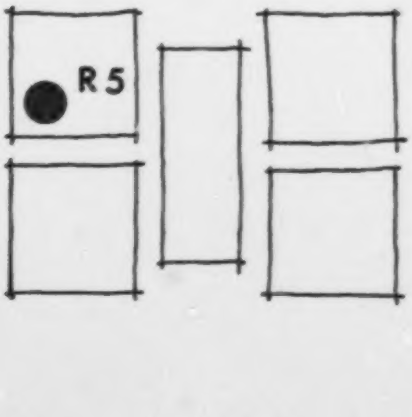
R - 4 Acquisitions Center, so that teachers seeing a resource in the examination area might quickly inquire as to whether or not the center has it. If they do, previewing can be done on the spot.

C - 3 Curriculum Resource Center, for the same reason.

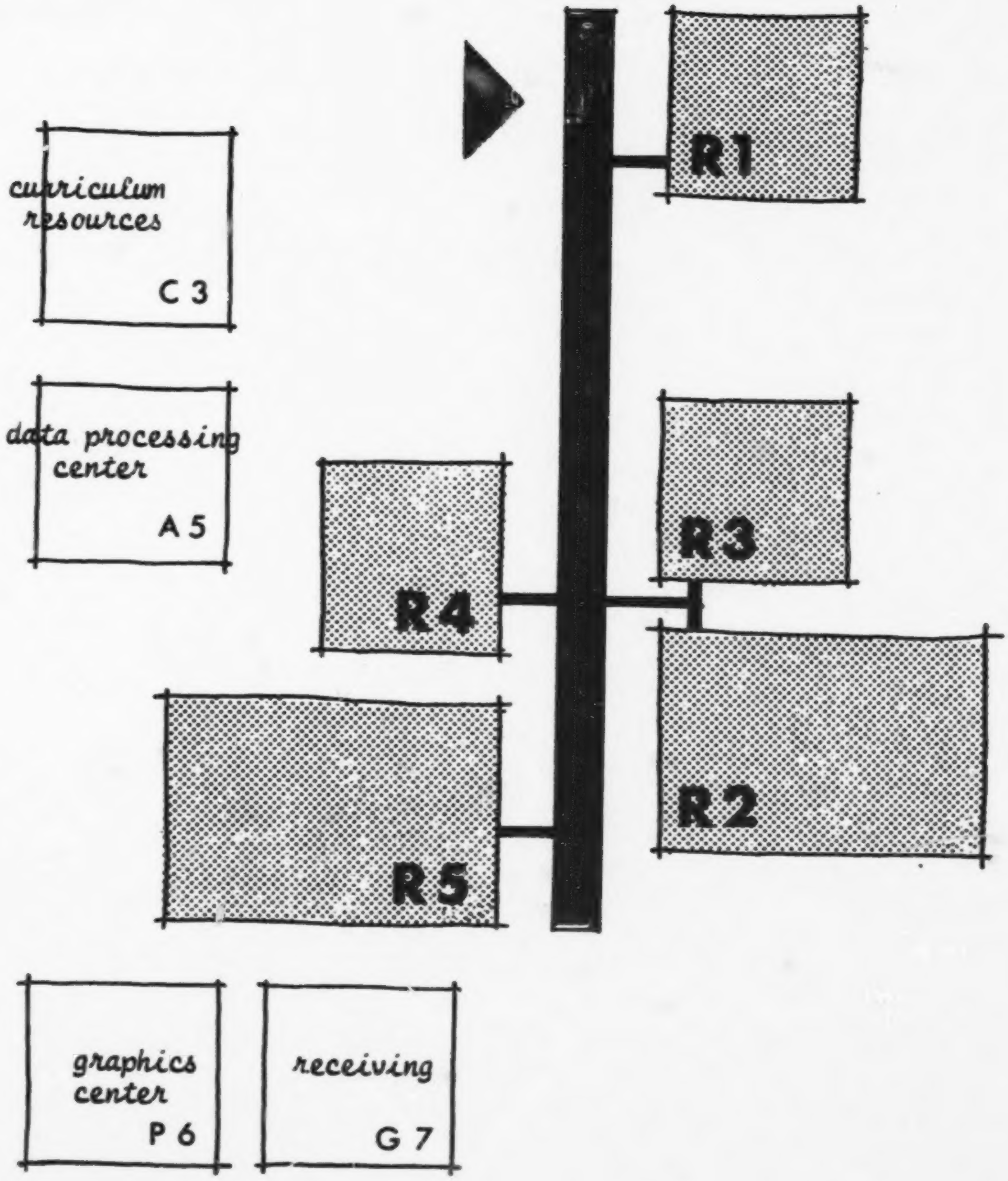
Thought might also be given to locating this component in the same area or part of the building housing the central receiving unit (G-7). While this is not a "must," it can cut down on the number of truck service points to the building.

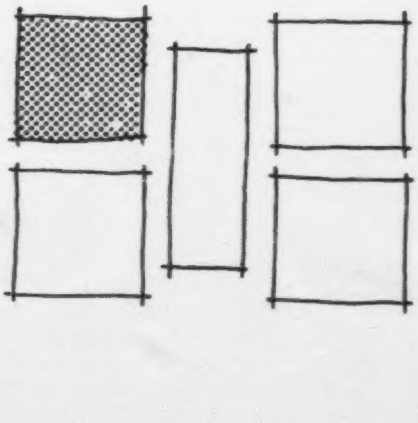
central collections **R 5**


preview area
counter area
shipping office
circulation
files
shipping and receiving area
central collection of instructional materials
loading area



RELATIONS
R


curriculum resources
C 3
data processing center
A 5
R1
R3
R4
R2
R5
graphics center
P 6
receiving
G 7



PRODUCTION SERVICES

A FUNCTION

This component provides office and conference facilities for the co-ordinators of the department, and serves as an information center for those who are trying to locate specific persons or places in the department.

B STAFF

The staffing is only co-ordinative, for most of the work is accomplished in the various divisions of the department. For this reason the staff will probably be limited to the Department Co-ordinator, any assistants, and the necessary clerical staff.

C FACILITIES

Reception and Waiting

- serves as a reception area for persons visiting the co-ordinative staff.
- serves as a general information office for persons looking for persons or places in the department.
- waiting-room furniture and desk for one receptionist.
- should be neat and well-appointed.
- should be the most accessible area in the department.
- a possible glass front onto corridor or lobby to accentuate its importance as an information center.

Co-ordinators' Offices

- comfortable and well-appointed
- directly accessible from reception area; directly or indirectly accessible from conference and secretarial areas.

Secretarial and Work

- houses necessary secretarial and clerical staff.
- should relate directly to reception area, and directly or indirectly to co-ordinators' offices.
- acoustically isolated from reception area.
- cabinets for storage.
- adjacent work room with counter-top area and space for office machines.

Conference Area

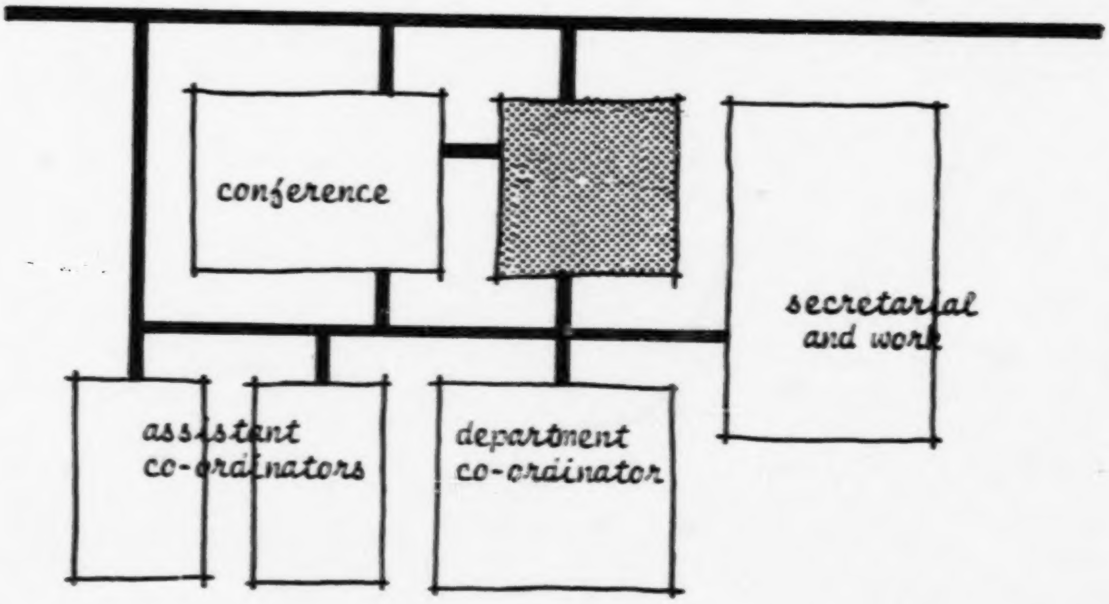
- serves department co-ordinators and, if correctly placed, can serve the entire department when needed.
- modular table units suggested for variable arrangement.
- generous write-on, tackboard, and display space.
- carpeting suggested.
- outlets and jacks for many different kinds of equipment.
- variable lighting levels suggested.
- accessible from reception area and co-ordinators' offices.
- preferably accessible from corridor.

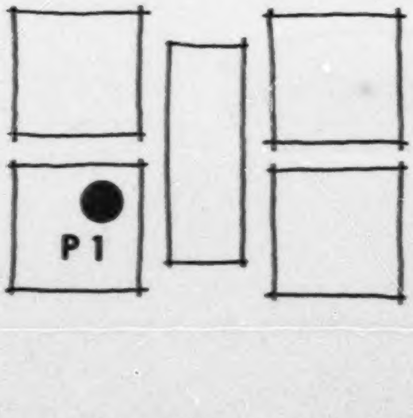
D GENERAL

The most important general point to be made is that of access and the high degree of public use that this component will receive. It should be directly related to the lobby or main circulation area, and serve as a "gateway" to the department.

This component should also be located in close proximity to the Production Research Office (P-2) since there will be a good deal of liaision between the two.

department office **P 1**


conference
secretarial and work
assistant co-ordinators
department co-ordinator



A FUNCTION

There are many kinds of services that this unit can provide in the areas of production research and evaluation:

- Research activities in new methods, new materials, and new production equipment.
- Dissemination of information to member organizations.
- Co-ordinated in-service programs in production.
- Advisory services to members on selection and maintenance of materials and equipment.
- Development of specifications for materials and equipment to be purchased for the center and for members.
- Sponsoring in-center and in-the-field trials and evaluation activities.
- Modification work on equipment to meet special needs. (this is does not cover routine maintenance and repair of equipment).

B STAFF

The talents of the individuals on the staff will dictate the actual needs. A sample set-up might include,

Director, production research division
Research staff members
Specifications Writer (Equipment specialist)
Technician(s)

One of these technicians might serve as a resident manager of the center's lecture and demonstration facilities (lecture hall G-3, conferenance area G-4 and training center C-6).

C FACILITIES

Resource and Secretarial Area

- the central area in the component, housing clerical staff and resource and reference materials.
- desks for secretaries, work tables for staff members.
- shelving for books, pamphlets, catalogs, etc.
- generous tackboard area.
- access to other rooms in component and to corridor.

Director's Office

- relate directly to resource and secretarial areas.

Staff Room

- desk and work space for production research staff.
- generous tackboard area.
- adjustable shelving on standards suggested.
- glass vision panel to workroom a possibility.
- relate to secretarial and resource area.
- double-door access from corridor suggested.

Workroom

- a room where staff members can perform minor tasks and modification work. Large modidification jobs will be done on-location or in the center's workshop (G-6).
- generous table-top space.
- generous tackboard and write-on surfaces.
- ample power-outlets, many at counter-top height.
- relate directly to staff room.
- double door access to staff room or corridor.

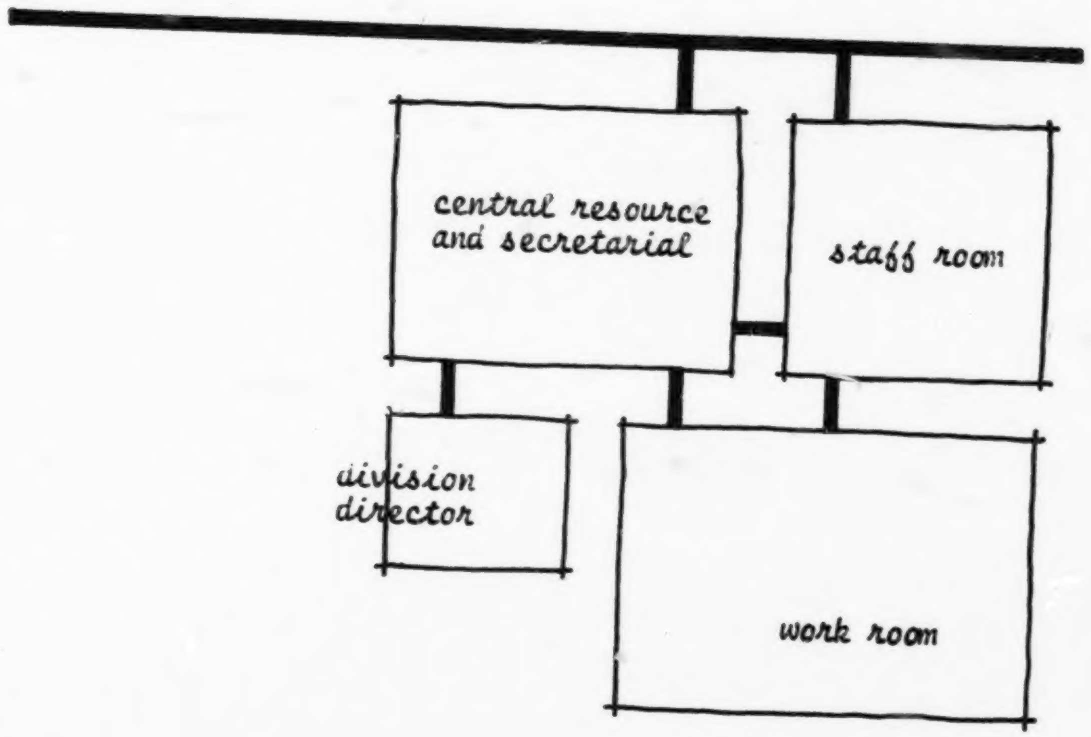
D GENERAL

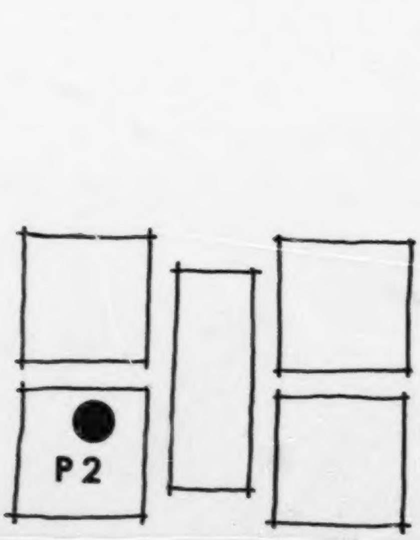
Public access to this component is not particularly important; it should be located on a major circulation path, though, to allow for equipment and materials access. Related components include:

P - 1 Production Department Office
G - 8 Regional Research

C - 6 Demonstration and Training
G - 3 Lecture Hall
G - 4 Conference and Assembly
} in an indirect way; primarily for test work.

production research **P 2**


central resource and secretarial
staff room
division director
work room



A FUNCTION

The Television Origination component can provide a wide range of TV services, ranging from occasional taping of material for classroom use to a full scale ETV station. The latter is particularly challenging, but is also particularly well-suited for inclusion in a service center.

ETV need not be confined to classroom instruction; it can aid the potential drop-out, be used in retraining programs, bring new experiences to students and parents alike. It is possible that such a station be tied in with ETV master planning now being conducted by the State Education Department and the State University of New York.

This component may undertake:

- live production of TV programs.
- taping of center-produced TV programs.
- taping of "off-the-air" TV programs from other sources.
- relaying of "off-the-air" programs.
- relaying of stored tapes from the center.
- relaying of stored tapes and film materials to member schools during "off-hours" for next-day use.
- co-ordination of origination from remote areas in the region (science labs, etc.)

The role being played by video tape is becomming more and more important; many predict that, except for news and other "spur-of-the-moment" programming, all TV work in the future will be pre-taped. Facilities should begin to recognize this importance.

This component will be presented on the theory that the service center will want to undertake an ETV program of substantial size. If the regional board does not want to go this far, facilities can be easily modified. If this is done, however, it is suggested that room for expansion be built into the component.

B STAFF

Staffing of this component will vary widely with the range of TV services offered and the talents of the individuals involved. Starting with a Director of the Origination Division and an assistant specifically charged to handle TV origination, the staffing becomes flexible. Particular talents needed may include those of producer-directors, engineers, tape editors, and various assistants and clerks.

C FACILITIES

DIVISION OFFICE AREA

Reception and Secretarial

- houses clerical staff for the division (which also includes components P-4 and P-5).
- some waiting furniture; desk for a receptionist; desks for clerical staff as needed.
- should be at the entry point of the division; may constitute a "gate" through which all persons must pass in order to prevent unauthorized entry.

Directors' Offices

- houses division director and assistant for TV work.
- relate directly to reception and secretarial areas.

TV Staff and Conference

- houses desks and work area for TV staff.
- may also serve as a conference space (with preview projection facilities for multi-media planning) or this may be a separate adjacent area.
- one wall devoted to large scheduling control board.
- generous tackboard and write-on surfaces.
- relate directly to reception area and to corridor.

TV Teaching Staff Offices

- for interim use by inside and outside staff members in preparing or going over scripts, directions, etc.
- may be used for small (2- and 3-man) conferences.
- relate to staff and studio areas.

STUDIO AREAS

Large Multi-Use Studio (30' x 40' minimum)

- permits more elaborate productions involving sets and a good number of participants.
- may be set up with two sets at a time with most camera equipment in the center.
- most likely a 3-camera unit.
- minimum ceiling clear height of 14',
- ceiling grid system recommended for lighting variation.
- modular dimming of lighting is important.
- curtain track in ceiling along two or three walls suggested for backdrop hanging.
- smooth floor surfaces suggested for moving TV camera.
- camera cable outlets required at many points along the walls.
- acoustical isolation from surrounding elements needed; sound lock should be provided at access points.
- air conditioning necessary.
- double door access to corridor and to set storage area.
- rear projection screen (and area) suggested for providing production backdrop scenes.

Small Teaching Studios (20' x 30' minimum)

- use depends on the size of operation, and the number of these studios in the center. Can be used for regular TV productions requiring little set work, can be used for continuity in ETV broadcasting, motion picture work and still photography (see components P-4 and P-5).
- basically a 2-camera unit.
- minimum ceiling clear height of 14'.
- ceiling grid system for lighting flexibility.
- modular dimming of lighting is important.
- curtain track in ceiling for backdrops.
- smooth floor surfaces for moving TV cameras.
- camera cable outlets required at many points along the walls.
- acoustical isolation from surrounding areas needed; sound locks should be provided at entry points.
- air conditioning necessary.
- double door access to corridor.

Control Rooms (10' x 16' minimum)

- one for each studio; to house audio and viewing equipment and staff.
- glass panel to studio desirable; should allow observer to see entire studio area if possible.
- glass panel through to corridor to allow visitors to view entire production operation is a possibility.
- floor might be raised 12"-18" to improve sight lines into the studio.

- minimum of 10' wide to accommodate two tiers of control equipment.
- studio lighting controlled from this area.
- air conditioning required.
- access to corridor and studio through the sound lock at the studio entry.

CONTROL AND ENGINEERING AREA

Central Control Area

- the "nerve center" of the TV unit; receives studio signals, "off-thea-air" signals, signals from remote locations and relays them to approrpriate locations or tapes them for later use.
- handles video tape or kinescope recording.
- handles any night-time TV distribution of motion pictures, film strips, or other graphic materials to dchools or other locations.
- contains all switchers, patchers, and master consoles.
- expansion should be provided for by placing a large storage are adjacent to this space and by using a demountable wall or "knock-out" panel.
- cable trays should be provided to all studios; this must be easily accessible for wiring changes.
- air conditioning required.
- adjacent recording room for video tape and/or kinescope recorders.
- adjacent film chain room contains projection chains and equipment for inspecting filmed materials.
- adjacent office for engineer on duty.
- easy access to all studios.

TELEVISION SUPPORT AREA

Storage Area

- storage area for TV equipment and materials. May be used as a tape storage unit for "ready-use."
- temparature and humidity requirements for tapes and other materials should be checked.
- fairly easy access to studio and control units.
- double door access suggested.

Maintenance Area

- for maintenance and workshop functions for TV equipment, sets and properties, etc.
- smooth floors for moving equipment.
- acoustical treatment suggested.
- double door access to corridor.
- may be shared with the film origination unit (P-4).

Ante and Dressing Area

- an ante or "green" room for waiting for cue to appear in TV productions, for lounging, etc.
- adjacent make-up, dressings, and toilet facilities.
- entire unit has easy access to studio area.
- monitor connection (telephone, buzzer, etc.) to TV control rooms suggested.

D GENERAL

First it should be pointed out that details for planning and designing this component will have to come from other sources; what has been presented can only be an overview of needs.

What is of prime importance to this component (and to the two to follow, film origination and photographic, P-4 & P-5), is utilization. Rather than provide a series of small studios of specialized use, it is suggested that the center take stock of its planned operations and consolidate on expensive studio space wherever possible.

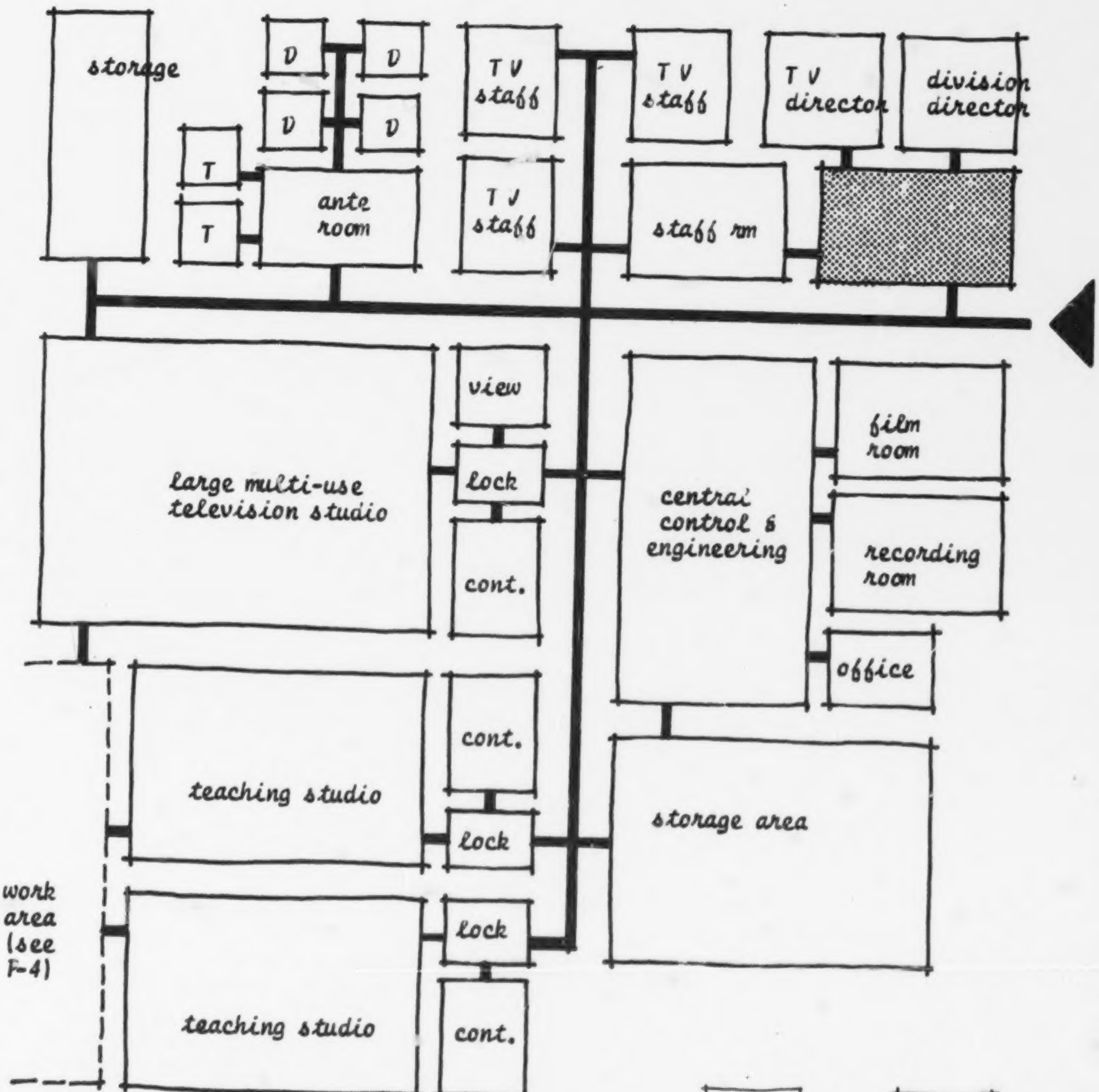
The large multi-use studio is a must for any operation that will even occasionally include a "big" production; in other times it can be used for smaller productions, film origination, and even still photography.

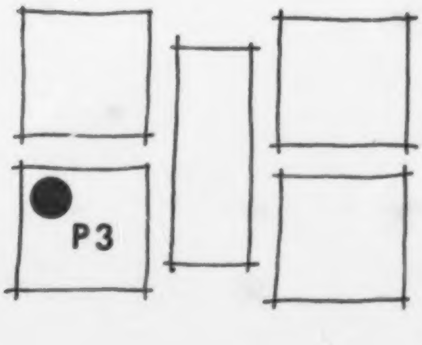
The same point holds strue for the smaller studios -- they can and should be used for TV, film and photographic work. It is suggested that their location in the center permits use by all three of these components.

A look at the diagram on the next page points up the matter of public access. It is not terribly important that this component be located in a particularly "public" part of the center. It is important, though, that traffic be funnelled into the component through the division office. Staff offices, faculty offices and dressing rooms should be positioned near this entry point.

Related components include film origination (P-4) and photographic and processing (P-5).

television origination **P 3**


storage
D
D
D
D
T
T
ante room
T V staff
T V staff
T V staff
T V staff
staff rm
T V director
division director
view
lock
cont.
large multi-use television studio
central control & engineering
film room
recording room
office
cont.
teaching studio
lock
storage area
lock
work area (see F-4)
teaching studio
cont.



A FUNCTION

The film origination unit can undertake any scope of operations the regional board may deem advisable. It can consist of a small unit using everyone else's facilities to a large central unit producing a great many films.

With the advent of television and video taping, it appears that this unit should not be particularly elaborate, possibly limiting itself to small, short, single-concept films. Actual handling of the center's film library (of center-made and commercial prints) is accomplished elsewhere (in central collections, component R-5);and film processing work is also done outside the unit (see P-5).

B STAFF

As was the case in the TV unit, staffing will vary according to scope of operations and the talents of individuals involved. An assistant director of the origination division might head up the film unit, with technicians and production staff as needed.

C FACILITIES

Film Studio

- an area to house filming operations, both with and without simultaneous audio recording.
- acoustical privacy a necessity.
- the same general points that were made for the TV studios in P-3 can be made here. As a matter of fact, this facility should be completely interchangible with a TV studio. The two functions might even share a common facility.

Control Area

- same considerations as TV control rooms in P-3.
- studios that might be used for film work might have a small storage room off the control area for audio test and maintenance equipment.

Equipment Storage Area

- houses filming and test equipment.
- adjacent to studios and sound recording area.

Preview and Conference

- allows staff conference and previewing of filmed materials, etc.
- rear projection suggested for "lights-on" discussion and editing of content.
- adjacent to common projection and control area.

SOUND RECORDING AREA

Central Projection and Control

- houses equipment to project into conference area and sound recording studios.
- used to co-ordinate activities in the sound recording studios.
- dark interior, few reflective surfaces to spill light on screens.
- rear projection screens to studio and conference area.
- acoustical isolation from these areas.
- access to studios and to corridor.

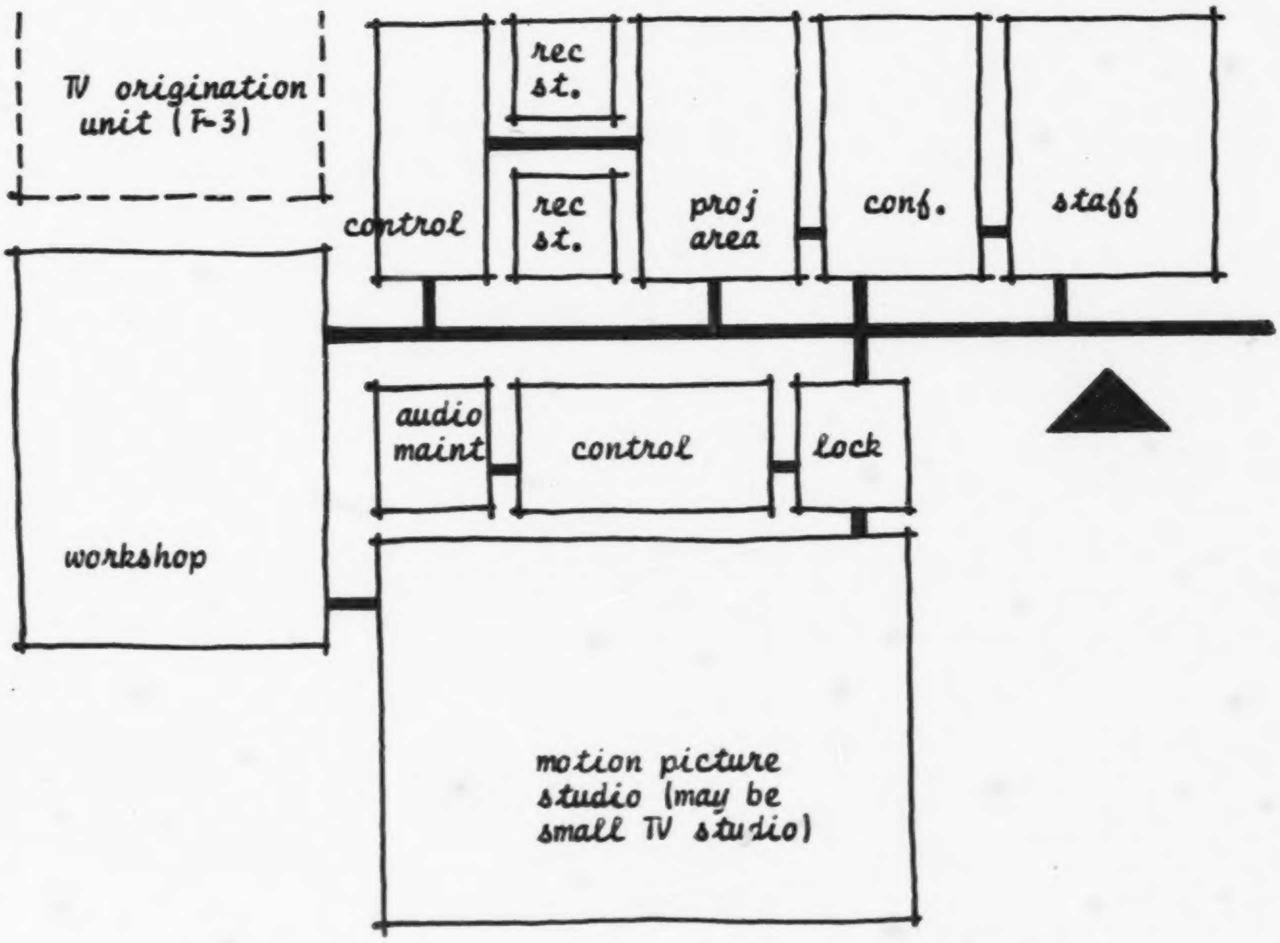
Sound Recording Studios

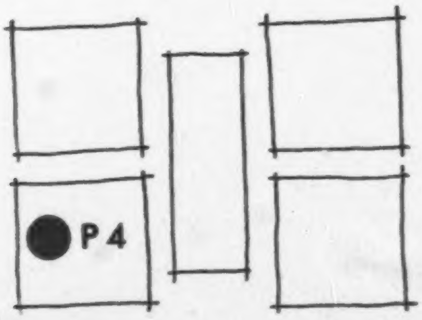
- small studios adjacent to the central control area for providing narration and dubbing for films.
- films rear projected into studio from central projection area for "lip sync" work.
- acoustical isolation required.
- glass panel to projection area for signals, etc.

D GENERAL

In all but the largest operations, actual filming can be conducted in the TV studios or on location. This component should, for this reason, relate strongly to the TV origination unit (P-3).

film origination **P 4**


TV origination unit (F-3)
control
rec st.
rec st.
proj area
conf.
staff
audio maint
control
lock
workshop
motion picture studio (may be small TV studio)



A FUNCTION

This component can serve the other production components by:

- shooting still and animated pictures for the graphics center (P-6).
- shooting still pictures, doing printing and developing work for the publications center (P-7).
- processing filmed materials taken in the origination components (P-3 and P-4).
- processing photographs from other sources, both at the center and throughout the region.
- conducting in-service training work in photography methods and dark room processing.

Processing of long movie films, color films, and TV tapes will probably be done commercially, considering the expense of handling this kind of work.

B STAFF

Staffing would most likely consist of a photographic and processing co-ordinator with production and printing staff as needed. As the scope of work undertaken by the unit increases, it will probably want to employ a small group of professional photographers. Someone in the unit should be charged with handling in-service training aspects.

C FACILITIES

Still Photography Studios

- set up to accommodate still photography work.

- the studios have the same requirements as the TV studios discussed in component P-3.
- these studios may be shared with the TV and film origination components.

Animation Room

- a separate area to house the animation stand.
- physical characteristics of the equipment housed should determine room size and shape.
- special illumination and power requirements must be checked.

Work and Editing Room

- houses equipment and provides staff space for cutting, splicing, editing and assembling films, prints, etc.
- generous counter-top area.
- requirements of individual pieces of equipment used must be checked.
- ample power outlets; many at counter-top height.
- high illumination a necessity.
- cabinents and shelving for materials storage (may be a separate adjacent area).
- accessible to preview rooms and dark room areas.

Preview Room

- a small conference-preview area for instant criticism of materials.
- elaborate projection equipment not necessary, but equipment to project all types of filmed materials processed here should be available.
- relate to corridor and work areas.

Photographic Dark Rooms

- amount and size depends on the scope of operation.
- in-service work may or may not be conducted in these rooms; the center may choose to provide for this in more local production units.
- power, water, and other services should be checked with manufacturers of standard darkroom equipment.
- dark surfaces needed to keep down light reflection.
- light "locks" at entry doors.
- full ventilation system.
- relate to studio and work areas; easy access to preview room.

Film Vault

- an area for interim storage of raw and processed film, print papers, etc.

- storage area for original copies of films made at the center.
- completely fireproof; a commercial vault unit should be considered.
- temperature and humidity control necessary.
- relate to dark room areas.

D GENERAL

Once again, the actual photographic work can take place in the TV studios if there are enough of them provided. This eliminates the need for many specialized facilities in the building when one generalized one can do.

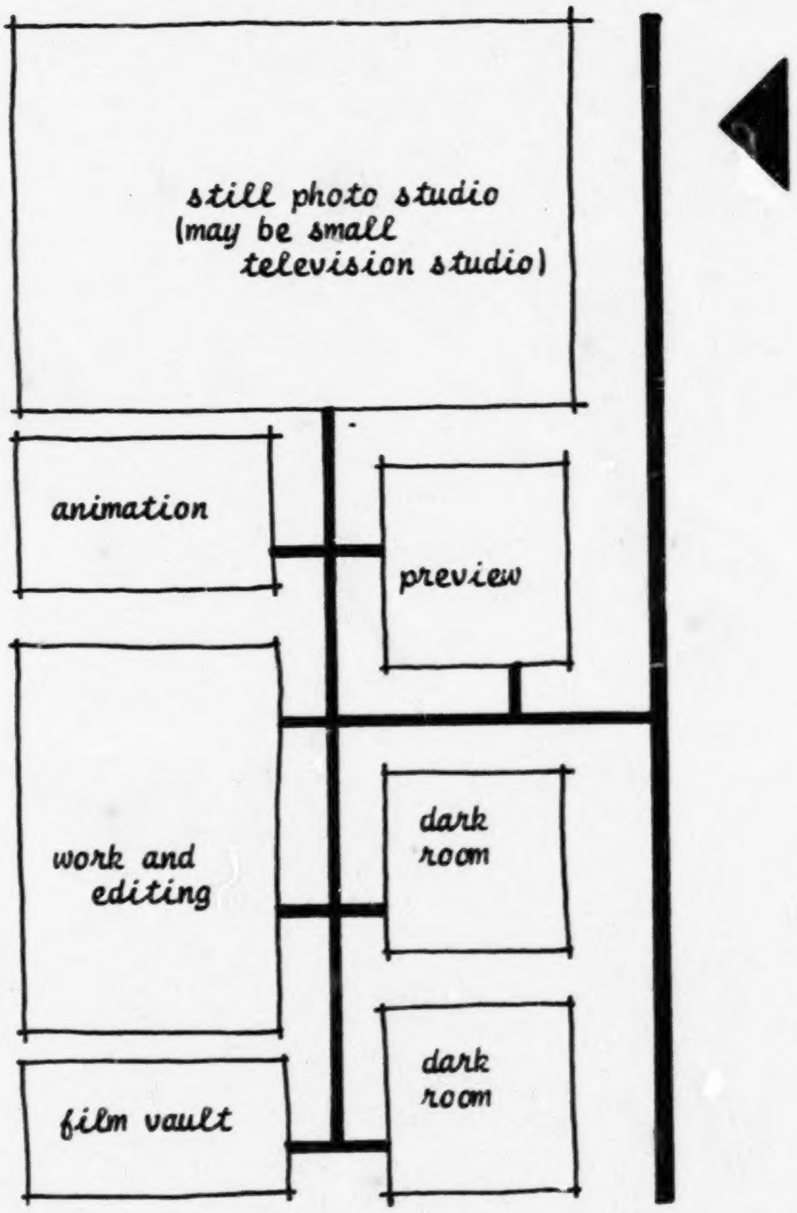
This component does not receive much public access, but should be centrally located with respect to the components that will use it:

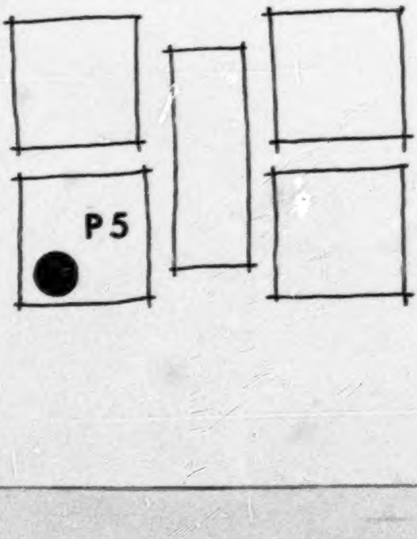
P - 3 Television Origination

P - 4 Film Origination

P - 6 Graphics Center

P - 7 Publications Center


still photo studio
(may be small
television studio)
animation
preview
work and
editing
dark
room
dark
room
film vault


P5

A FUNCTION

The primary purpose of the graphics center is to receive and fill requests for visual aids to be used in the region. From sketches and descriptions, the professionals in the center can make high-quality but individualized instructional aids of many kinds.

Persons or groups requesting visual aids may include,

- teachers and staff members
- students and student groups
- administrators
- boards of education
- professional societies
- parent-teacher groups
- curriculum development teams
- curriculum resource specialists
- publications staff
- other participants

Services provided by the graphics center may include,

- coloring, inking posters, graphics, charts, etc.
- titling, lettering of visuals
- sketching and drafting
- mounting, laminating and paste-up
- transperencies for overhead use
- illustration of publications
- displays and exhibits
- all graphic material for slides, films, etc.
- three-dimensional models
- modification of commercially-available aids

The graphics center is not in competition with the producers of commercial instructional materials; rather it recognizes the need for providing individualized aids for teachers in the region. In many cases it may just be modifying commercially-produced aids.

The center will also encourage staff members throughout the region to make use of its facilities, equipment, and advice for individual projects. In-service training programs should be conducted. Through these efforts, many of the minor production tasks requiring simple skills and inexpensive equipment can be transferred to a more local level. The realization of this goal will slowly free the professionals in the center to work on more complicated and detailed projects.

Photographic work will be undertaken in the photographic and processing component (P-5); large graphics projects and displays may be built in the center's workshop (G-6) instead of in the graphics center.

B STAFF

Staffing will vary with the size of operation and the talents of individuals. It can be accurately predicted, though, that the demand for high-quality visuals will grow as teachers become aware of the advantages, and the staffing should reflect this. Personnel included might be:

Division Director
Graphic artists and specialists
Field Specialists

The latter can be added when in-the-field production of visuals becomes an active part of the center's program. It should not be forgotten, too, that students in the region who are interested in art or industrial design might serve as assistants in the center, for cash or for credit.

C FACILITIES

Staff Office Area

- includes housing for the division director, clerical staff, and the graphics staff.
- at the entry point to the graphics center.
- generous amount of space allocated to filing cabinents for copies of the center's work. this may be a separate area.

Conference and Preview

- an area for 6-10 persons for staff planning, for immediate testing and view of graphics produced.
- rear projection recommended (for lights-on discussion).
- should house all equipment needed to project the various visuals that might be made in the center.
- variable lighting levels suggested.
- accessible to graphics workroom, in-service workshop and staff office.

Graphics Workroom

- the operating center of the division, housing most of the production equipment, work space, etc.
- generous counter-top area for work.
- drafting and light-tables may be needed.
- abundant tackboard and display area.
- many different types of storage from large under-the-counter spaces to wide, flat drawing storage trays will be required.
- one area should be treated for light-sensitive production work; may involve separate lighting and a dark curtain on a track.
- many electrical outlets suggested; some at counter-top height.
- air conditioning suggested.
- double door access to corridor.
- relate to staff office and in-service workshop.

In-Service Workshop

- allows for individuals to conduct projects in conjunction with the graphics center.
- may be an in-service "classroom."
- may also be used for large projects and "overflow" from the graphics workroom.
- generous counter-top area.
- generous storage units, cubbies, and trays.
- chalkboard or write-on surface suggested.
- ample power outlets.
- glass vision panel to graphics workroom a possibility.
- double door access to corridor or workroom.

Storage Area

- used for storing bulk materials for the graphics center.
- should be centrally-located with respect to the graphics workroom and in-service workshop.

Toilet and Washroom

- relate to graphics workroom and in-service workshop.

D GENERAL

Several times we have mentioned local production centers, and networks of centers (see pages 24-27). These centers, located in individual schools, in individual districts, or in the buildings of other participants might include:

transperency making equipment
drawing and drafting boards
lettering and drafting instruments
reflex camera in copy stand
materials supply
facilities for mounting, sorting, previewing, etc.

These decentralized facilities can in turn be backed up by the more extensive services provided at the center.

The location of the graphics center should be a central one in the building; because of its use by many of the other components, it should occupy a "crossroads" position.

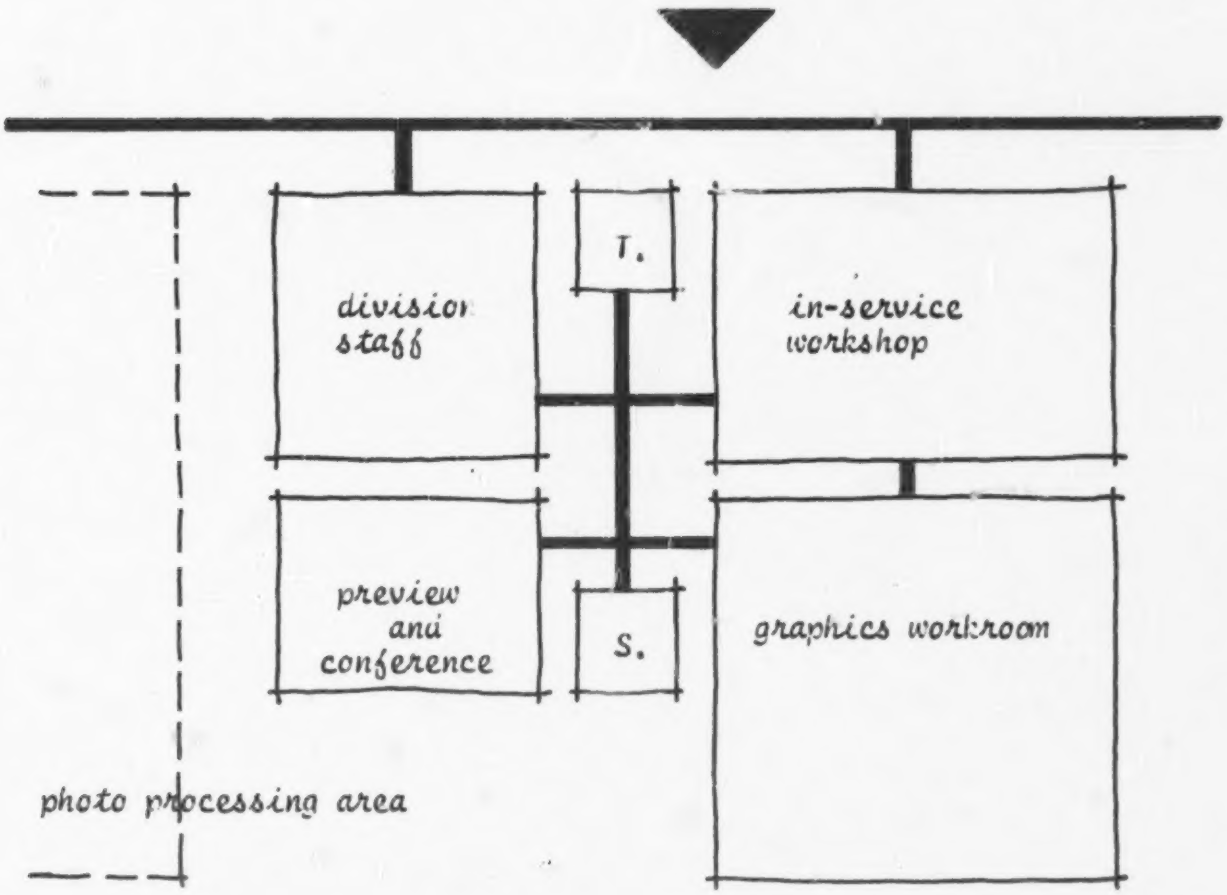
Closely-related components include:

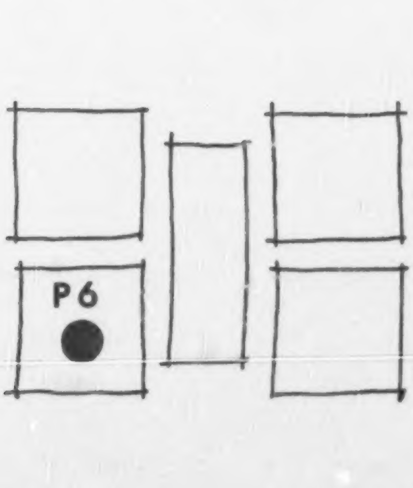
P-5 Photographic and Processing
P-7 Publications Center

Indirectly related components may include:

P-3 Television Origination
P-4 Film Origination
C-2 Curriculum Development Center
C-3 Curriculum Resource Center
C-6 Demonstration and Training

graphics center P 6


division staff
T.
in-service workshop
preview and conference
S.
graphics workroom
photo processing area



A FUNCTION

A small but professional publications staff can assist in many areas of endeavor by,

- writing and editing pamphlets about the center, the various districts and organizations, the regional board, etc. for professional and public edification.
- writing and editing curriculum guides, resource fact books, etc for teacher and staff use.
- writing and editing information pamphlets on new methods, new materials, new equipment, new services and other special features for professional and public edification.
- assisting wherever needed in projects compatible with the center's talents and objectives.

In general, this center can fill as many requests for work as it can, doing the most important or significant projects first. Large volumes, or those requiring extensive layout, lithographing, etc. will probably be produced or "made-up" elsewhere.

This unit will work closely with the Graphics Center (P-6) for production of charts, illustrations, cover designs, and so forth. For sake of consistency, however, it will most likely do most of its own formating and layout work.

B STAFF

The staffing of this division will probably include a division director (for this component and for central reproduction, P-8), a number of editors and copy writers, and a format and layout specialist. In early stages of development, these duties can be carried by a few persons; an increasing demand will probably call for a larger, more specialized staff in the future.

C FACILITIES

Reception and Secretarial

- houses clerical staff for typing copy, etc.
- some lounging furniture; but not much required.
- supply area required for the various stencils, plates, and other reproduction media used.
- direct access to corridor and rest of component.

Director's Office
Editor and Copywriter Offices

- desks and typewriters for editors, copywriters and rewriters. same for the director.
- acoustical treatment suggested.
- acoustical isolation from clerical space.
- a pleasant working atmosphere.
- direct access to reception-secretarial area.

Make-up and Copy Preparation

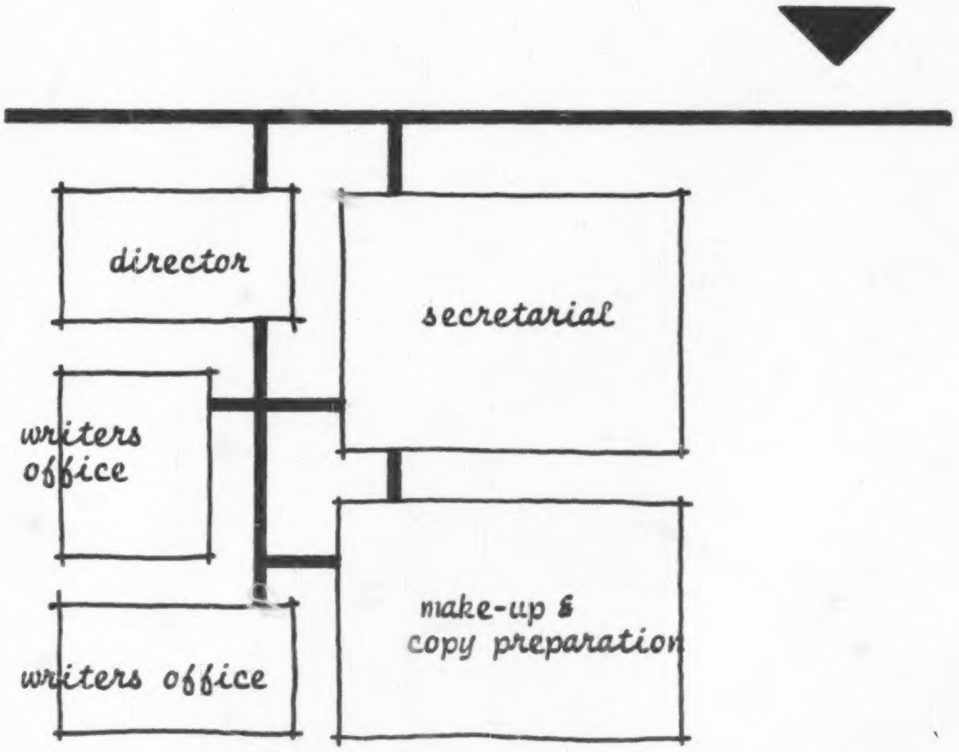
- for use by staff in pasting, formatting and putting materials together for publication.
- include areas for art work, lettering, mounting and paper cutting.
- generous table top area.
- generous tackboard and display area.
- direct access to reception and writer office areas.

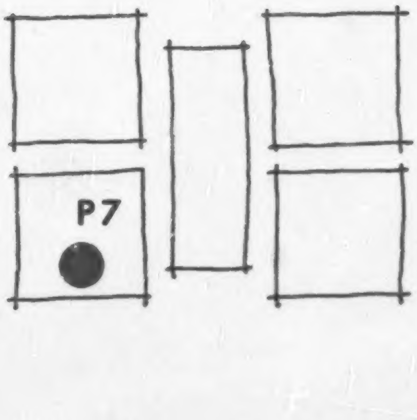
D GENERAL

While this component will not receive a great deal of public use, it should be fairly accessible in the center -- many persons will have close working arrangments with the publications staff, will be continuously called in during layout periods, etc.

Related components should include:

P - 8	Central Reproduction	close relationships to each of these are suggested.
P - 6	Graphics Center	
P - 5	Photographic & Processing	


director
secretarial
writers office
make-up & copy preparation
writers office


P7

A FUNCTION

This component can supply the publications division and the entire center with reproduction services with a degree of convenience and co-operation not available from other sources. While many of the other components in the center may find it convenient to own a dry-copying machine, or a spirit duplicating device, it becomes more economical and efficient to do more expensive process work in a central location. Not only will expensive equipment be conserved, but it will be placed in the hands of professionals who can guarantee quality work.

The types of central production work the center wishes to do in this component are matters of individual choice.

They will probably not include:

- letter-copying, best done on a machine in each of the departments.
- spirit-process duplicating or other short-run processes better handled on a local basis.
- extensive lithographing work requiring a large shop.
- extremely large quantity work, which may be more economically to completely "farm out."
- extensive binding work.
- work requiring special color or engraving processes.

They probably will include:

- offset and direct-process printing.
- small letterpress work.
- silk-screen and other transfer methods.
- ozalid whiteprinting
- large xerography or dry-copy orders.

Make-up and copy preparation of materials will not be done in this component, but either in the publications center (P-7) or by the originator of the work.

B STAFF

The staffing for this component may include,

Director, Publications division (P-7)
Duplicating Manager
Letterpress Operator
Offset press Operator
Non-specialist staff, apprentices, etc,

There is no reason why high school students interested in this line of work cannot be employed as printers helpers, trimmers, collaters, bindery operators, etc. reducing the total number of professionals required.

C FACILITIES

Make-up and Printing Room

- houses space and equipment for make-up, type-setting, and printing.
- functional layout should be discussed with the professionals involved before design of the area begins.
- equipment is likely to include:
    - offset press
    - letterpress
    - ozalid or diazo whiteprint machine
    - xerography or dry-copy machine
    - silk screen printer
- generous table-top area required. Certain requirements (such as stone slab for letterpress chase levelling) must be checked.
- type-storage area and cabinets as required.
- special filing cabinents for offset plates, etc. may be required.
- racks for stacking wet copy should be provided near press areas.
- direct access to manager's office and storage area.
- double-door access to finishing room.

Finishing Room

- houses equipment and work space for collating, trimming, binding and packaging printed materials.
- automatic collating and binding equipment is up to the individual center; functional layouts should be checked before design if these are used.
- generous table top area for working.

- generous shelving for ready-to-go materials.
- hard floor surfaces suggested for cart use.
- double door access to printing room and loading area.

Managers Office

- small area for the manager of the reproduction unit.
- one wall devoted to scheduling control board.
- glass vision panel to printing area a possibility.
- direct access to corridor and rest of component.

Storage Area

- space for storage of papers, inks, plates, etc.
- temperature and humidity control a necessity.
- deep shelving for large (17"x 22") papers necessary.
- double door access to a corridor or foyer connecting printing and finishing rooms.

Loading Area

- may be an exterior dock, or simply close access to the receiving area. this access may be by elevator.
- if exterior, it should be sheltered from the elements.
- direct access to finishing room.

D GENERAL

This can be an out-of-the-way area in the center, since there is rare opportunity for public access. Service access is important, though, and the component should closely relate to the central receiving area, or have one of its own.

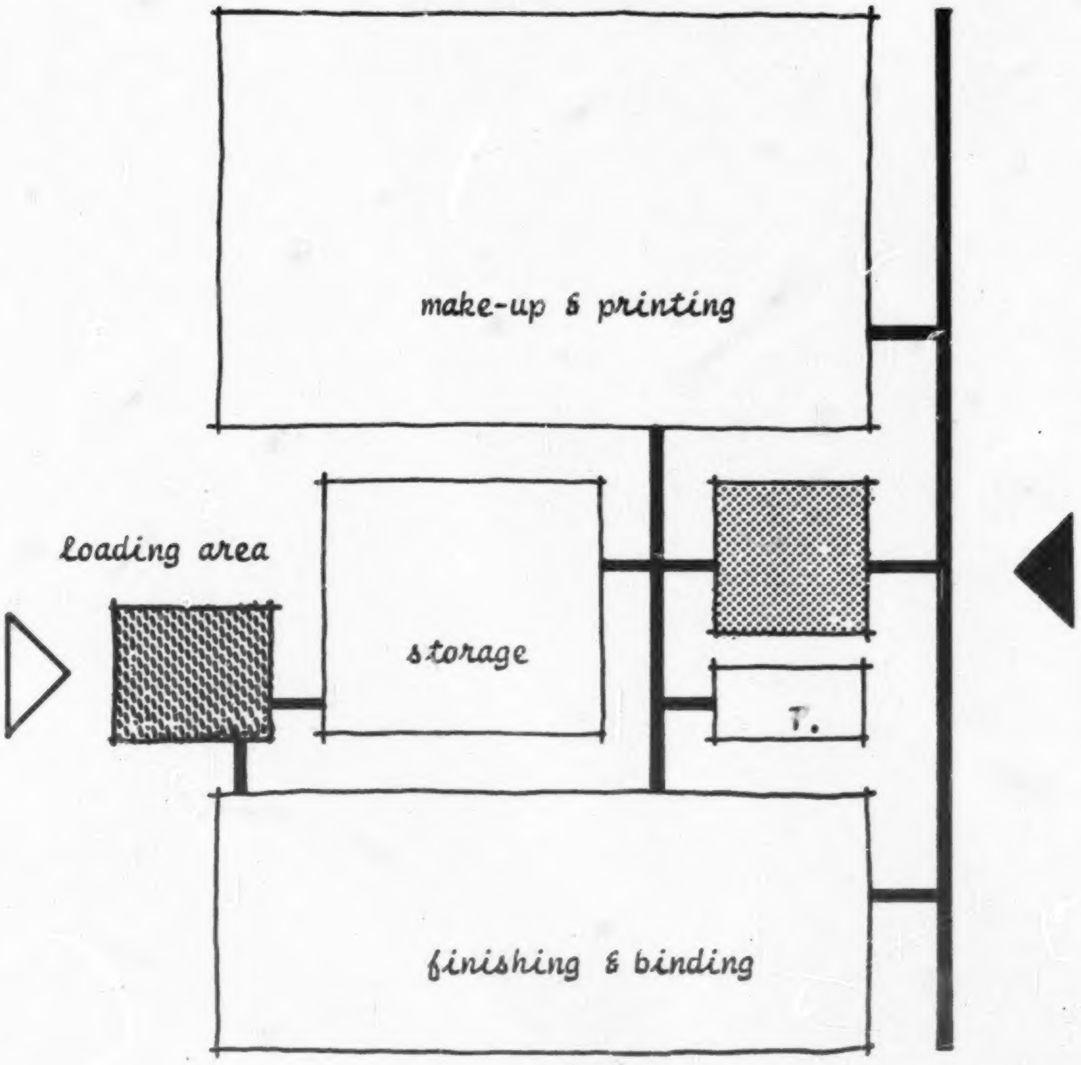
Another factor to be considered is machine noise; placing the component out-of-the-way will help eliminate this problem. A final "plus" for this type of location is that it can give the component room to expand.

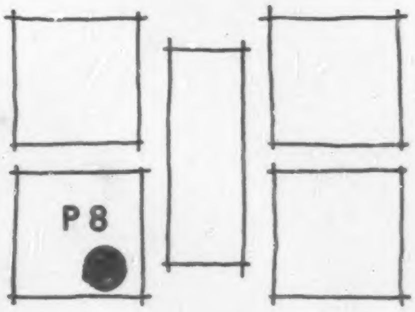
Related components include:

P - 7 Publications Center (very close)

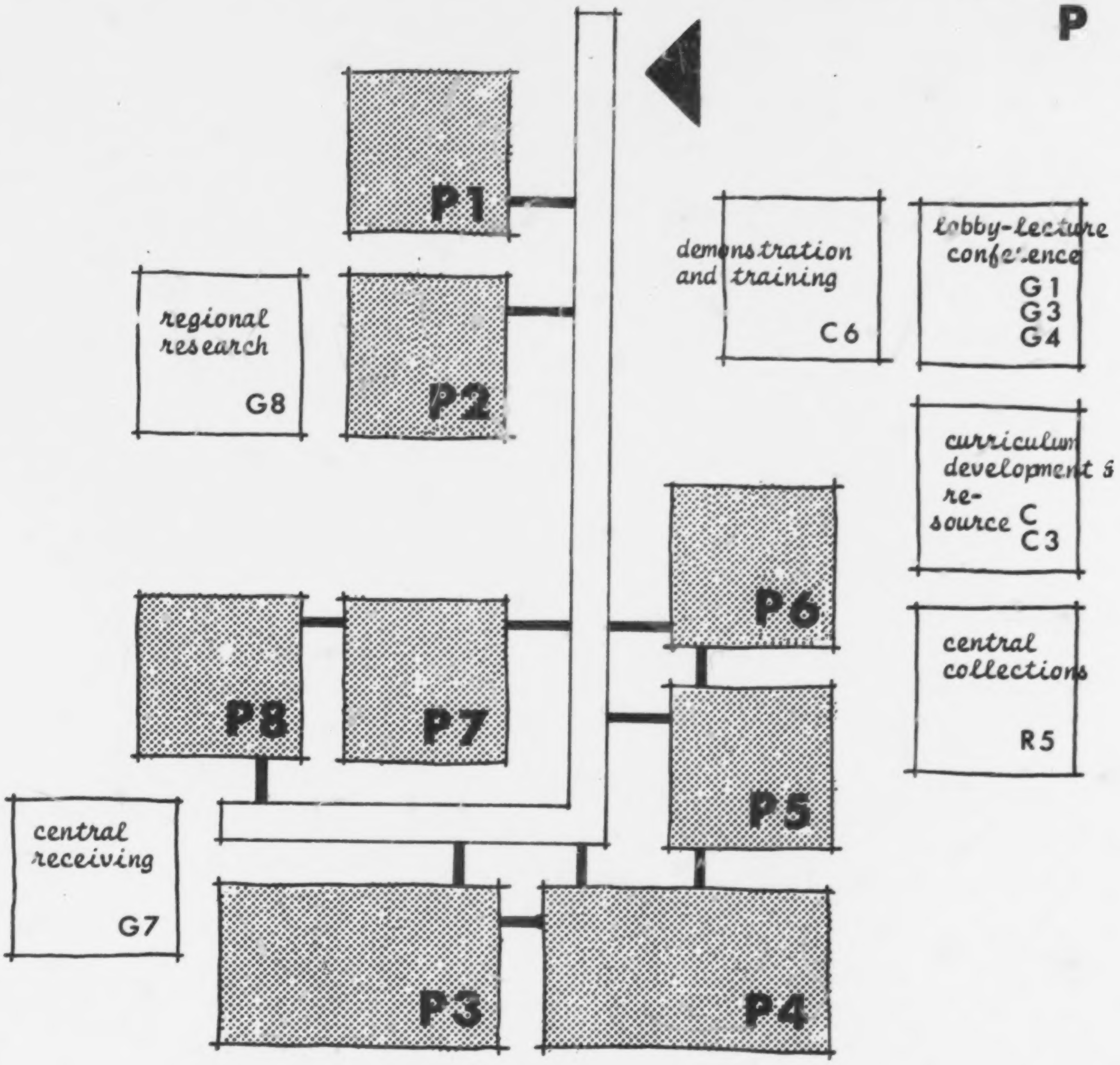
G - 7 Central Receiving

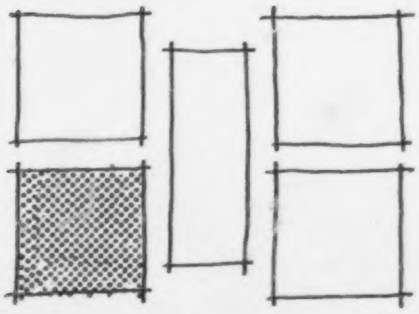
central reproduction **P 8**


make-up & printing
loading area
storage
T.
finishing & binding



RELATIONS
P


P1
regional research
G8
P2
demonstration and training
C6
lobby-lecture conference
G1
G3
G4
curriculum development & resource
C
C3
P6
P8
P7
central collections
R5
P5
central receiving
G7
P3
P4



CURRICULUM SERVICES

A FUNCTION

This component provides office and conference facilities for the co-ordinators of the Curriculum Services Department, and serves as an information center for those wishing to locate specific persons or places in the department.

B STAFF

The staffing is only co-ordinative, for most of the work and effort is accomplished in the department's five divisions. For this reason the staff will probably be limited to the Department Co-ordinator, any assistants, and the necessary secretarial and clerical staff.

C FACILITIES

Reception and Waiting

- serves as a reception and waiting area for persons visiting the co-ordinative staff.
- serves as a general information office for those looking for persons or places in the department.
- waiting furniture, and desk for one receptionist.
- should be neat and well-appointed.
- should be the most accessible area in the department.
- a possible "glass front" onto corridor or lobby to accentuate its importance as an information center.

Co-ordinators' Offices

- comfortable and well-appointed.
- directly accessible from reception area; directly or indirectly related to conference and secretarial areas.

Secretarial and Work

- houses necessary secretarial and clerical staff.
- should relate directly to reception area and directly or indirectly to co-ordinators' offices.
- acoustically isolated from reception area.
- cabinets for storage.
- adjacent work room with counter-top work areas and space for office machines.

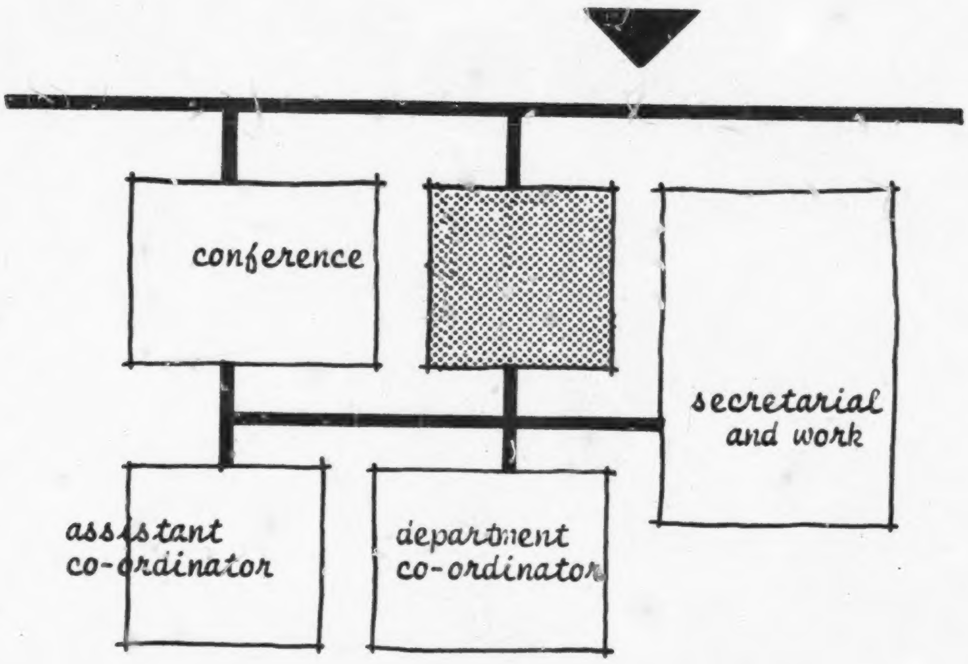
Conference Area

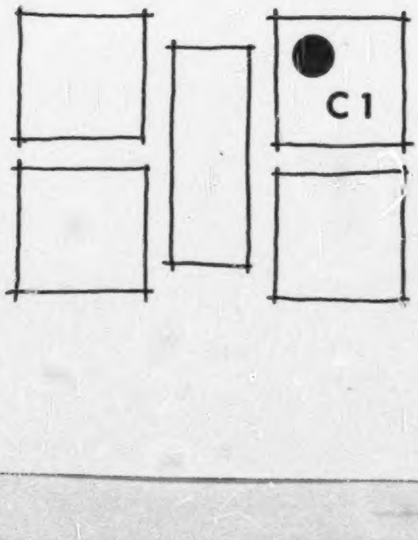
- serves department co-ordinators and, if correctly placed, can serve the entire department.
- modular table units suggested for variable arrangement.
- generous write-on, tackboard and display surfaces.
- carpeting suggested.
- variable light levels suggested.
- accessible from reception area and co-ordinators' offices.
- preferably accessible from corridor.

D GENERAL

As in all department offices, the most important point to be made is that of high degree of public use. For this reason, the component must be well-located, just off the building's main circulation area, and a "gateway" to the department.

department office **C 1**


conference
secretarial and work
assistant co-ordinator
department co-ordinator



A FUNCTION

As schools move away from textbooks and syllabi as the only tools at their disposal to forge curriculum, there is more and more need for staff and facilities to accommodate development activities.

Small projects have been and will probably continue to operate in individual schools; there are many points, however, to recommend larger projects to the regional service center:

- Projects can be undertaken at the request of a member organization, and the results disseminated to other members for their information and possible use.
- The center can bring in outside specialists, and make up teams from a wider range of personnel than can the individual school.
- The center can provide administrative staff and project space for the team.
- The center can support the project through its resource staff, professional resource library, etc.
- The center can make the necessary pamphlets, guides, instructional aids and media to support the project.
- The center can conduct in-service training programs in order to put projects in effect.

B STAFF

There will be two types of staff members in this kind of component. First, there would be a general, permanent staff (consisting of the division director, necessary assistance, clerical aid, etc.) to implement and co-ordinate projects. The second element would be of a more interim nature, serving on specific projects. This group could be drawn from the center's resource personnel, interested teachers, specialists in the field, and other interested "outsiders."

C FACILITIES

Division Director's Office

- serves as reception, clerical and administrative office for the division; houses the general staff.
- division director may have a separate office.
- relate to corridor or circulation path.
- accessible to project and preview areas.

Conference and Project Areas

- house individual projects which will occupy the room from start to finish.
- generous tackboard, write-on and other display space.
- generous table-top work space.
- comfortable chairs for informal conferences.
- work sink in every room.
- ample outlets, TV jacks, etc.
- generous wall storage units (shelving, cabinets, etc.)
- relate to reception area and preview areas.

Preview Rooms

- available for the project teams to use in developing and testing supporting materials.
- small (no need to seat more than 8-10 persons) but well-equipped.
- rear projection suggested.
- variable lighting suggested.
- generous write-on and tackboard surfaces.
- relate to project areas.
- relate to corridor, if possible, for use of other components in the department.

Storage Area

- for storage of materials and supplies for the various projects.
- relate to project rooms.

D GENERAL

It is not particularly important that this component be on a main circulation path, for most persons using it will do so quite regularly. Persons serving as visitors or consultants should, however, be able to easily find the component after seeking directions at the department office (C-1).

Related components include:

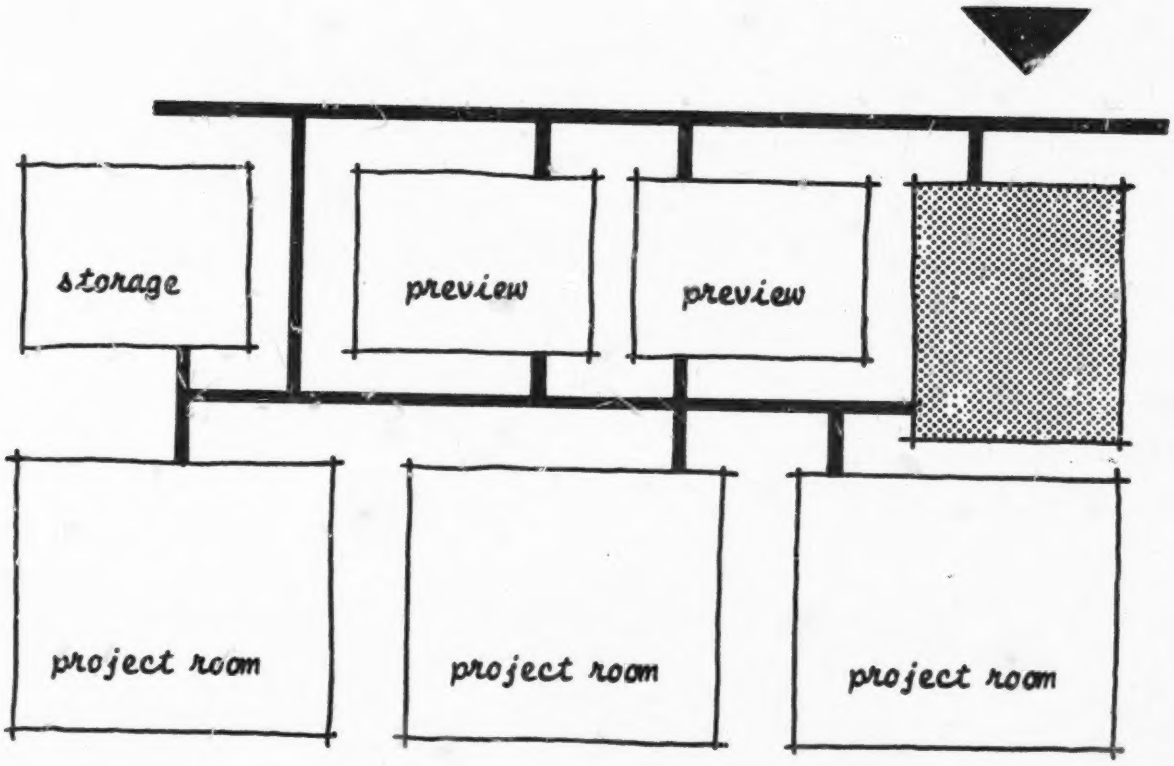
R - 2 Professional Resource Library (this relation may not be so important if the resource library plans to use CCTV or other means of rapid facsimile transmission to fill requests for information).

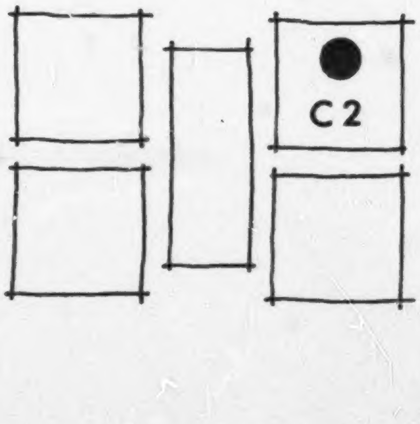
C - 3 Curriculum Resource Center

Indirectly related components include:

P - 3 Television Origination
P - 4 Film Origination
P - 5 Photographic and Processing
P - 6 Graphics Center
P - 7 Publications Center

curriculum development center **C 2**


storage
preview
preview
project room
project room
project room



A FUNCTION

The curriculum resource center can provide two related types of services:

1 Provision of resource staff members in the various discipline areas. These professionals would be housed in the center and while they would conduct in-service work there, they would spend a great deal of time in the field. While most of these resource staff members would be permanent employees at the center, there is no reason why they cannot be supplemented by interim specialists in the field.

2 The service center can expand this service by providing facilities for the various disciplines, spaces or "corners" to house current materials, gadgets, equipment etc. A program such as this depends on teachers' coming in and browsing, and must be accompanied by changes in school scheduling, etc. to allow teachers time to do this.

If the first approach is taken, a battery of offices and a conference room or two will suffice for this component. The following discussion would be more applicable for the center employing the second approach.

Deciding which discipline areas should be included is up to the individual regional board; for discussion purposes, the following have been considered:

ACADEMIC DISCIPLINES:	- mathematics - science - social sciencess - language arts
APPLIED DISCIPLINES:	- music arts - fine arts - industrial arts - commercial subjects - physical education
ELEMENTARY-ORIENTED:	- elementary education - kindergarten and pre-school

B STAFF

The resource staff would be provided for each discipline as the needs dictate; some areas may only require one specialist while others may need more. Supervisory personnel need only include a Curriculum Resource Director and clerical help.

C FACILITIES

Reception and Secretarial

- serves as access point for the whole component; new staff members or visitors will use it as an information desk.
- some lounging furniture should be provided although this is not primarily a waiting room.
- direct relation to corridor or major circulation path into the component.

Division Director's Office

- houses the division director.
- relate directly to reception and secretarial area.

Conference and Preview Rooms

- for use by resource staff for conferences, small in-service groups, etc.
- for use in reviewing resources.
- standard preview room suggestions: rear projection, variable lighting, ample display surface, etc.
- number required will vary.

Mathematics Area
Social Sciences Area
Commercial Subjects Area
Elementary Education Area
Kindergarten Area

- designed to house equipment, guides, kits and miscellaneous materials for browsing, use and reference.
- might contain special typewriters.
- pleasant atmosphere.
- generous tackboard, write-on and display areas.
- adjustable wall shelving recommended.
- generous counter-top and table-top space.
- ample power outlets.
- access to corridor or central foyer space (see diagram).

Science Area

- same as above.
- small demonstration laboratory and equipment may be provided.
- acquaria and specimen storage areas may be provided (central provision of these resources for distribution to schools will most likely be handled through central collections, R-5).
- small glass-blowing and other lab arts area may be provided.
- storage areas may be provided for expensive or rare equipment for professional in-center use only.

Language Arts Area

- same as above.
- might include a small audio laboratory for monitoring and testing tapes, recordings, etc.
- storage space for records and tapes for use and for demonstration purposes.

Music Area

- same as above.
- might also include a small but well-equipped studio for listening, dubbing, recording, etc.
- storage areas for records, tapes, sheet music, etc.

Arts Area

- same as above.
- might also include remedial areas for teachers to experiment with equipment and processes new to them or not available in their own schools.
- more counter and table-top spaces.
- requirements for special equipment (kilns, etc.) should be checked.
- adjacent storage area.
- natural light a suggestion.

Physical Education Area

- same as above.
- might also include a small remedial gymnasium (possibly a standard 36'x 52' station) with wood floor and a slightly increased ceiling height (15'-18').
- provision of some equipment (trampoline, weights, gymnastics apparatus, etc.) that individual schools might not own, so instructors can get a chance to use them.
- adjacent locker and shower area.
- adjacent equipment storage area.

Home Economics Area
Industrial Arts Area

- these are probably only offices since most demonstration can take place in the field. The center may choose, however, to build and equip a full shop or kitchen.

D GENERAL

The point made before about teacher use should be mentioned again; if the regional board feels that these facilities will not get the required teacher use, it should take steps to eliminate them or to give the teachers more free time.

Another general point has to do with size; these facilities will take up a good deal of space in the center, and they might be much more pleasant to use if their size is "played down." This can be done, for instance, by grouping them around central foyer/commons areas which convey a relaxed feeling. Consider this as opposed to simply stringing the resource areas out down a long corridor.

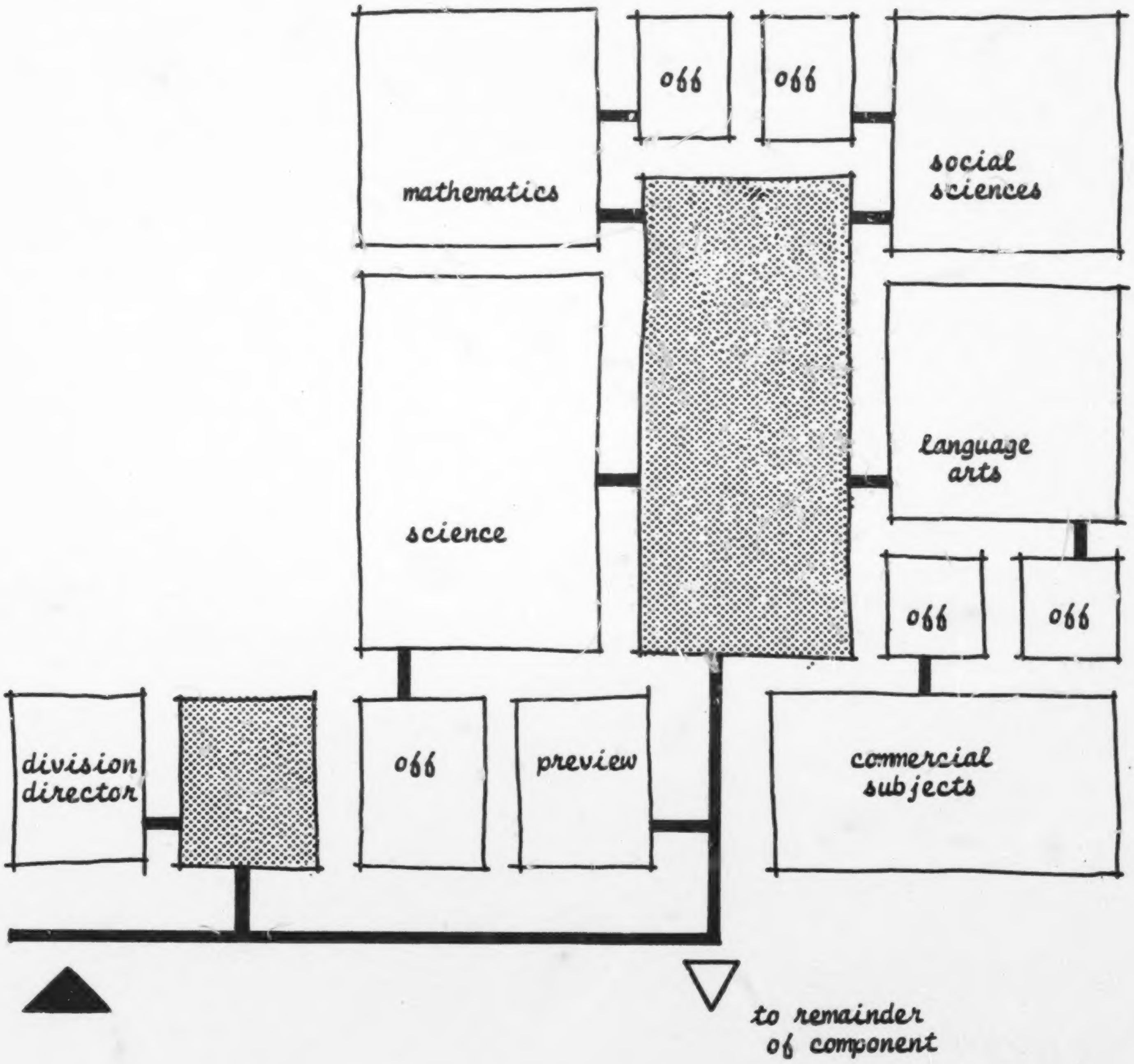
Related activities and components may include:

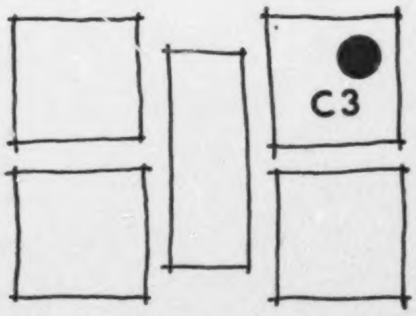
C - 2 Curriculum Development Center

R - 5 Central Collections (this may only be a phone connection. A teacher may see a resource in the science discipline area, and want to know if the center has it for his use).

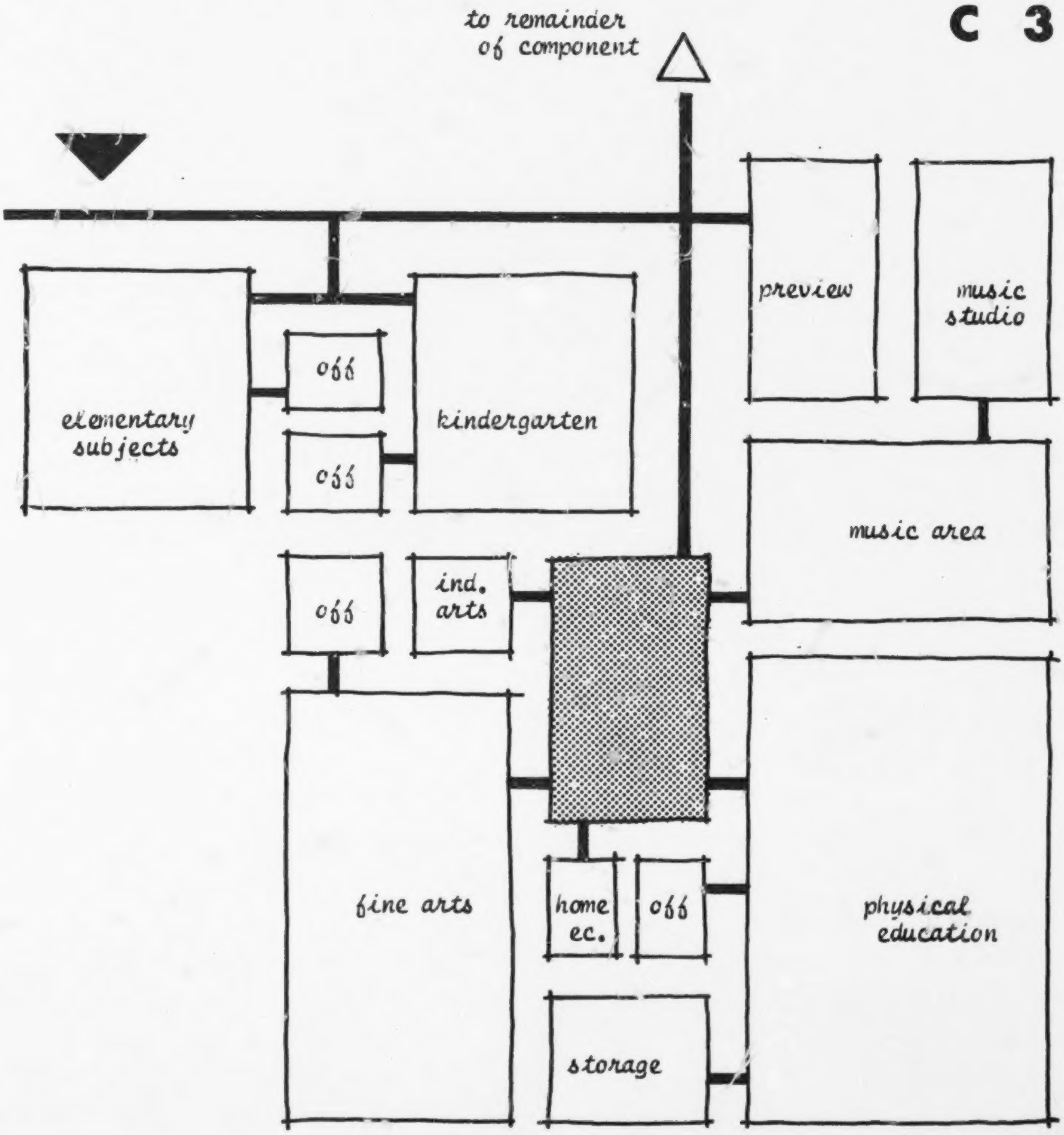
P - 6 Graphics Center.

curriculum resource center **C 3**

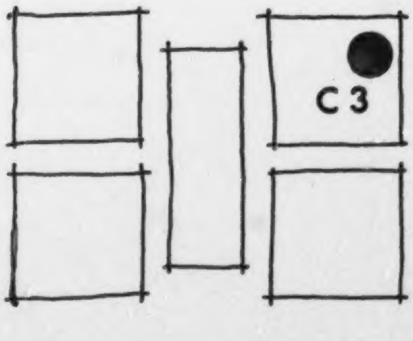

off
off
mathematics
social sciences
science
language arts
off
off
division director
off
preview
commercial subjects
to remainder of component



C 3



to remainder of component
preview
music studio
elementary subjects
off
kindergarten
off
music area
off
ind. arts
fine arts
home ec.
off
physical education
storage



C 3

A FUNCTION

The special service division can supplement the curriculum resource division by providing resource and advisory staff in non-academic areas. These areas may include,

transportation
maintenance
cafeteria and health
adult education
home and family living

This unit can also provide office and conference space for administrators of many of the programs mentioned in Chapter 2 that could be administrated through the center but not housed there:

programs for gifted children
programs for culturally-deprived children
programs for mentally-retarded and brain-damaged children
programs for the physically-handicapped
programs for the emotionally-handicapped
programs for drop-outs, etc.
many other special efforts

B STAFF

The staffing of this component varies with the types of specialists and program co-ordinators the center feels it should provide. It should not be afraid to design more space than it feels it needs, however, to house staff for new programs as they are implemented. A Special Services Division Director will supervise these efforts.

C FACILITIES

Reception and Secretarial

- serves as reception, waiting, and work area.
- some lounging furniture; but not much required.
- adjacent or included work area.
- relate to corridor or main circulation path.
- accessible to all offices in the componet, by foyer or interior corridor.

Division Director's Office
Assistant Director's Office
Co-ordinators Offices

- relate to reception area.
- might have a separate access to corridor.

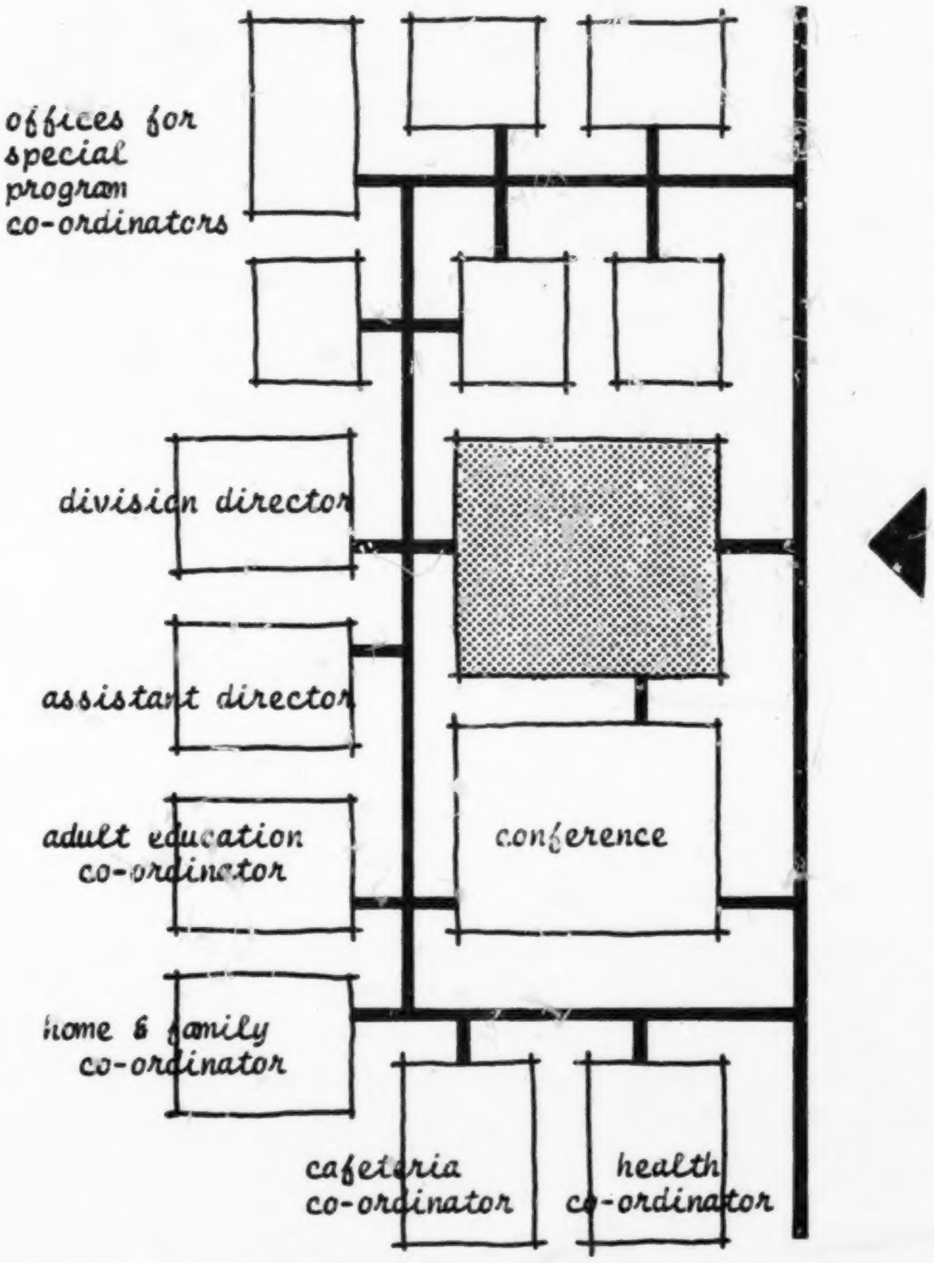
Conference Area

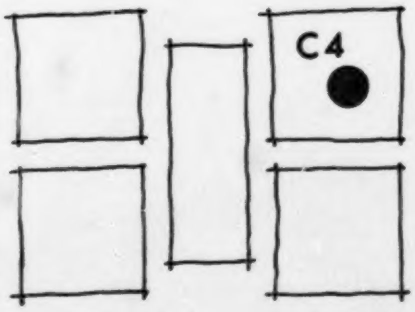
- used by directors and co-ordinators for small (8-10) informal discussions and conferences.
- not not be over-equipped with presentation equipment.
- accessible to offices
- accessible to corridor.
- may well be shared with other components.

D GENERAL

This component will not receive a great deal of use by the general public or even constant visitors. Most of the co-ordinators will probably use their offices as "home bases" from which to conduct their field operations.

special services **C 4**


offices for special program co-ordinators
division director
assistant director
adult education co-ordinator
home & family co-ordinator
conference
cafeteria co-ordinator
health co-ordinator



A FUNCTION

The pupil personnel services division is assigned many tasks, all of which are tied to students both as human entities and as statistics. Services may include:

1 GUIDANCE: While child guidance is a grass-roots problem and should be handled on that level, this division can employ co-ordinators to channel information to counselors throughout the region, hold meetings, conduct large-scale projects and conduct in-service work.

2 PSYCHOLOGICAL: With the wealth of new developments in this field, center-employed co-ordinators can provide a constant stream of information, discussion, and in-service training in this area to local personnel.

3 TESTING: A regional testing co-ordinator can not only serve as an adviser to local co-ordinators, but can conduct regional testing programs for statistical analysis. Most testing would be done in the field, but subjects may be brought to the center on occasion.

4 CENSUS AND ATTENDANCE: Regional taking of school census, compilation of attendance figures, making out of school aid reports, etc. can save schools a great deal of time and effort. Also, a single source of statistics can be made available. Data processing of this information can be handled at the center (in component A-5).

B STAFF

The staffing for such a division would include a director, any assistants and clerical help, plus co-ordinators in the various pupil personnel services areas.

C FACILITIES

Reception and Clerical

- for visitors and subjects for in-center testing or interview.
- attempt at a non-institutional feeling should be made.
- close to a secondary building entrance.
- at the hub of the personnel services area.
- possible adjacent area for data card punching and/or computer read-out. even a simple compiling/sorting device (without the computer) may be handy for statistical work.

Division Director's Office
Co-ordinators' Offices

- small one- or two-man offices allowing for personal interview.
- small but pleasant and neat.
- should relate to reception and conference areas.

File Room

- for record storage; file cabinents probably to be replaced in the future by microfilm storage drawers and a microfilm reader.
- controlled atmosphere as necessary for record storage
- relate to reception-clerical area.

Conference Room

- for staff meetings, large-group (more than one- or two-man, 8-10 persons) consultation, etc.
- relate to offices and circulation corrddor.
- may be shared with other curriculum components.

Testing Area

- for testing small groups or individuals in the center; may be used in sampling and evaluation work.
- preferably a large room with inexpensive carrels rather than built-in cubicles.
- carrels wired (or designed to be wired) for programmed instruction devices.
- atmosphere should be as pleasant as possible.
- indirect relation to testing co-ordinator's office.
- may be TV-monitored from testing co-ordinator's office.
- relate to reception area.

Larger-Group Space

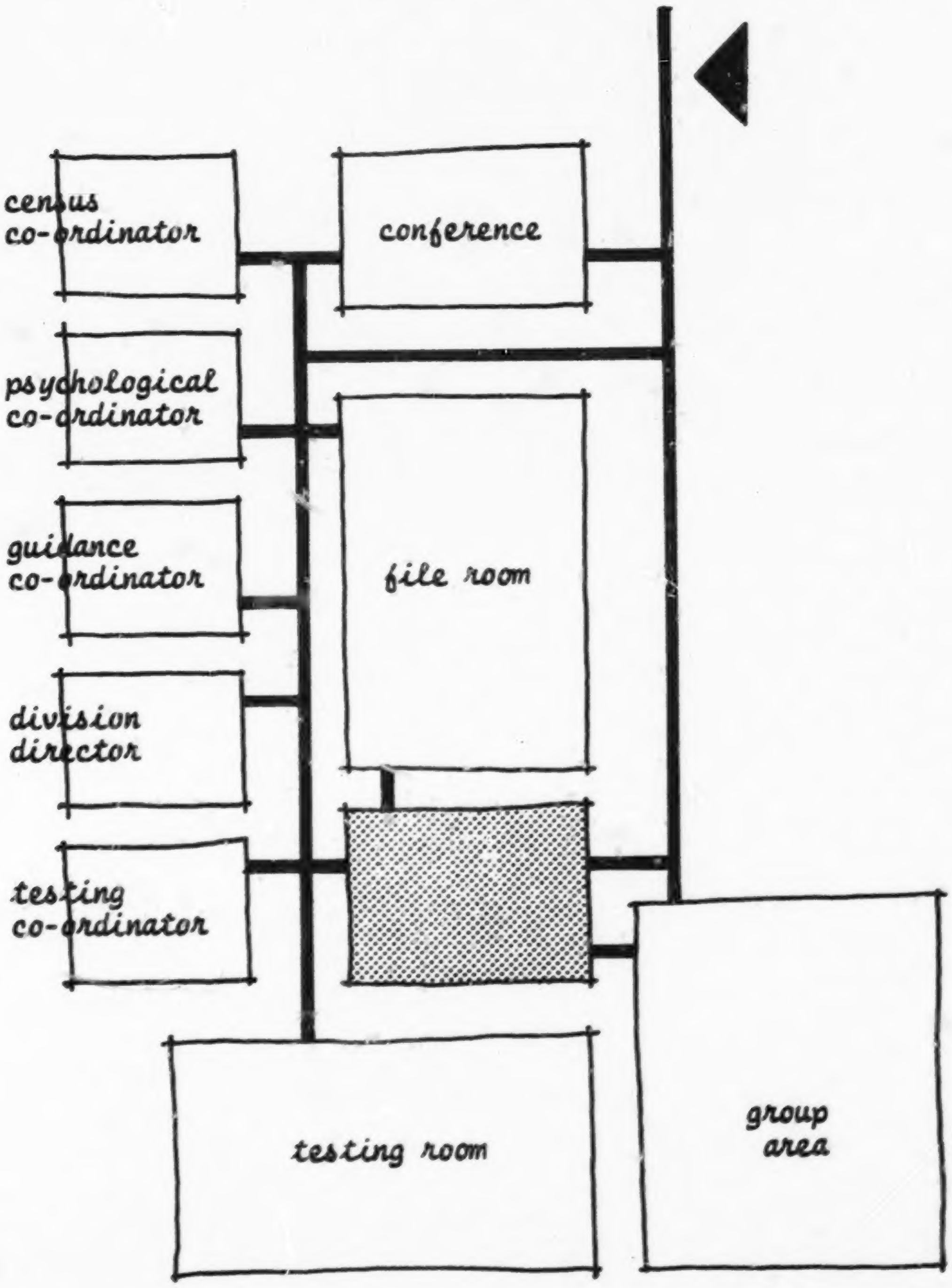
- large empty room (for 15 or 20 persons) that can be adapted to any kind of use the division may require.
- atmosphere should be plain and "unattached." portable wall coverings, etc. may be employed to liven up the space when necessary.
- natural light suggested, but 100% darkening required.
- full 110/220 power service
- adjacent viewing room with a one-way mirror and separate access.
- adjacent storage area for equipment and furnishings.
- easy access to reception and corridor areas.

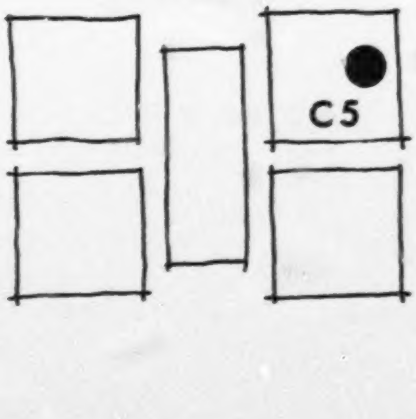
D GENERAL

The most important point to be made about access is that this unit be close to a secondary entrance to the building, an entrance that visitors and subjects for testing or interview can "get to know."

This component should be directly or indirectly related to the Data Processing Center (A-5). If all data card punching and sorting is to be done in the data processing area, the two should be related so that a flow of cards and material is not torturous between them. If punching and readout is accomplished in the PPS component, a dataphone connection to the actual computer may well be sufficient.

pupil personnel services **C 5**


census co-ordinator
conference
psychological co-ordinator
file room
guidance co-ordinator
division director
testing co-ordinator
testing room
group area



A FUNCTION

Since in-service training, both formal and informal, is an integral part of the daily activities of a regional service center, it is suggested that a special administrative unit be established for its co-ordination.

In-service training is accomplished in many different ways. The demonstration and training center might accommodate:

1 FORMAL TRAINING . .

. . consisting of:
seminars and discussions
workshops
tours and field trips
lectures and presentations
experiments and projects
programmed instruction
courses for degree credit

. . staffed by:
regional discipline specialists
center staff members
curriculum development leaders
interested local staff members
specialists in the field

. . housed in:
the demonstration and training area
project areas in the center
individual schools
homes and businesses

To accomplish this formal training, this unit must provide a core administrative staff to make arrangments for the inception and operation of in-service courses.

2 INFORMAL TRAINING . .

. . consisting of:
informal discussions, coffee hours
local workshops
local faculty and staff meetings
private consultation
private projects and research

To accomplish this informal training, the staff must foster and encourage an attitude on continuous informal in-service training through every opportunity it gets.

3 DEMONSTRATION TRAINING . .

. . Consisting of:	displays of materials and equipment demonstrations of new methods demonstrations of new equipment

To accomplish this goal, the unit will not only have to provide areas in the center to show new materials and equipment, but will have to arrange for demonstrations of them wherever and whenever possible. It should see to it, for instance, that new large-group methods and media are applied in its own larger-group sessions.

4 NOVICE TRAINING . .

, . Consisting of:	student-teacher resource areas student-teacher and supervisor conferences encouragement for first-year teachers encouragement of center use for all novice teachers

The center can serve as a meeting place where teams of student-teachers, first-year teachers, master teachers and supervisors can meet, discuss and plan. The supervisors will probably be permanently housed in the center.

B STAFF

Since the bulk of in-service training loads will be carried by interim staff members serving as course "chairmen," the units own staff need not be large:

Director, training division
Assistants (as nedded)
Demonstration Center manager
Demonstration Center technician
Student-teacher co-ordinator
Supervisors (as needed)

C FACILITIES

DEMONSTRATION AND TRAINING DIVISION OFFICE

Reception and Clerical

- reception and clerical area for the Division Director and his assistants.
- should contain some waiting furniture, desks for receptionist and clerical staff.
- relate to corridor or major circulation path.

Division Director's Office
Assistants' Offices

- small offices and informal conference areas for the administrators of the division.
- relate to reception and clerical area.

Conference Room

- serves for general conference purposes, staff meetings, etc.
- access to entire demonstration and training unit.
- facilities for rear projection; variable lighting is suggested.
- generous tackboard and write-on surfaces.

DEMONSTRATION FACILITIES

Demonstration Center

- may be a closed room, or just an alcove off the main lobby, used for displays of materials, equipment, etc.
- must invite teachers and visitors to "come in and look around."
- should be cheerful and informal, inviting visitors to handle and play with the displays.
- experimental lighting a possibility.
- walls should be designed to accommodate adjustable shelving, pegboard panels, etc.
- all possible power services (including TV jacks, etc.)

Demonstration Classrooms

- large enough to house groups of 25-30 persons.
- preferably interior spaces, used for demonstration and in-service class purposes.
- common rear projection area.
- possibly use of modular tables for variable arrangments.

- variable lighting (4-5fc, 15-25fc and 40-50fc ranges) suggested.
- 100% darkening a requirement.
- black-lighting for demonstration is suggested.
- a number of display surfaces suggested: rear projection screen, front projection screen (for overhead projector) write-on surface, tackboard area.
- air conditioning a possibility.

Office and Workroom

- houses demonstration center manager and technician.
- may contain powercontrols for demonstration classrooms.
- should be connected to classrooms by a monitor device.
- direct access to classrooms and demonstration center.
- indirect access to corridor ledding to lecture hall (G-3) and conference rooms (G-4) if the same technician is to supervise all of these.

Ready Area

- a place where a visiting specialist or staff member can brush up on his presentation before making it.
- contain writing surface and chairs.
- possibly a small sink and mirror.
- relate directly to classroom areas.

Ready Storage Area

- for interim storage of equipment, displays, etc. to be used in the demonstration facilities.
- double-door access preferred.
- relate directly to classrooms and demonstration center.

STUDENT-TEACHER FACILITY

Central Resource Area

- use for waiting, browsing, relaxing, informal meeting.
- contains lounge chairs, tables, display racks.
- generous write-on and tackboard areas.
- should be pleasant and inviting.

Conference Area

- a small room for 8-12 persons.
- provisions for display.
- services for instructional media (TV jacks, etc.)
- may be used by the entire training component.

Co-ordinator's Office
Supervisors' Offices

- small areas to house these staff members.
- should be separate to allow for closed conference.
- relate directly to central resource area.

D GENERAL

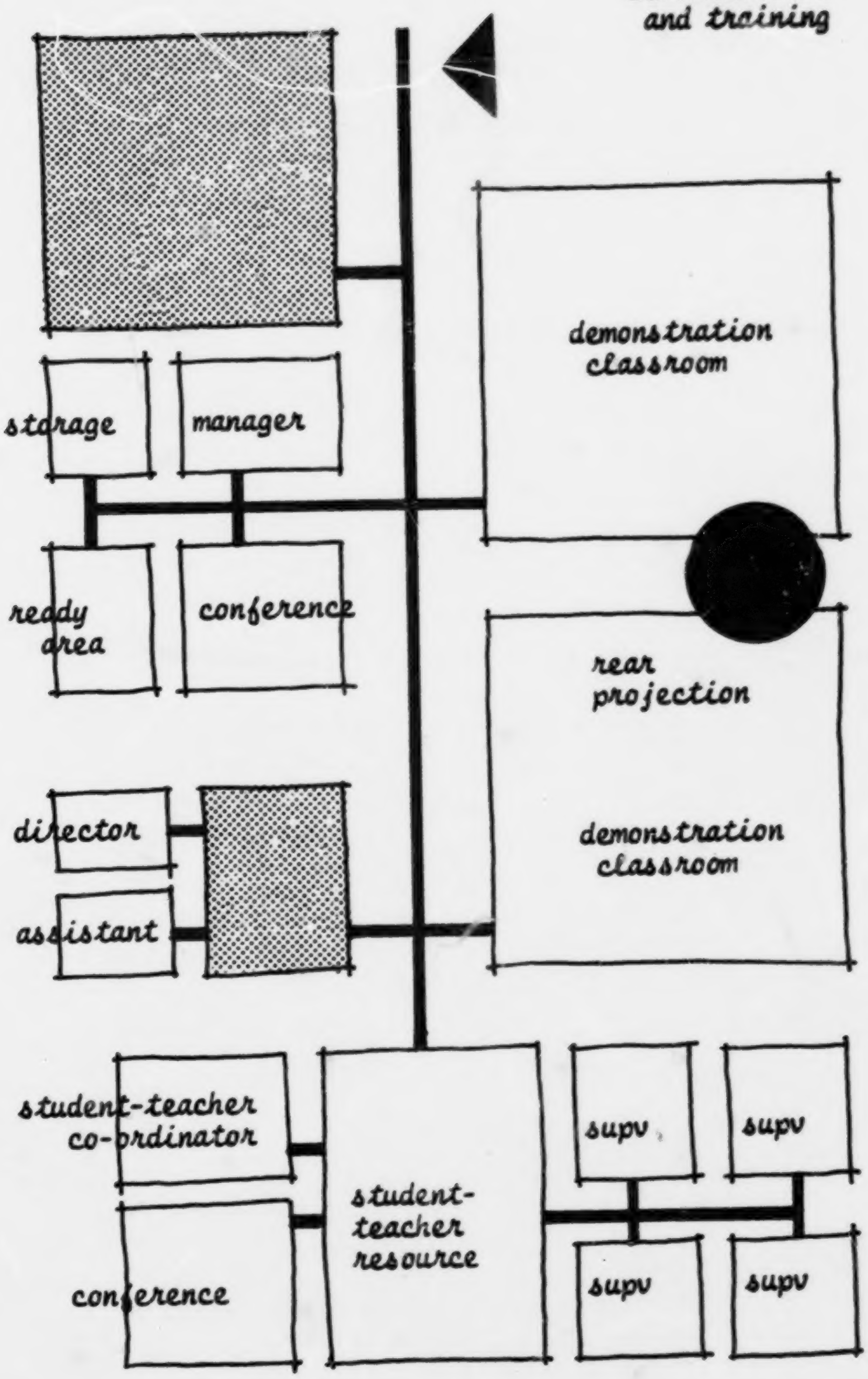
The most important parts of this component, as far as public use is concerned, are the demonstration facilities. The Demonstration Center should be directly off the main lobby, preferably "in the way" of people circulating through it. If this is the case, they can stop in and look around fairly effortlessly. The demonstration classrooms should also be just off the main lobby, so they will be easy to find both day and night. All demonstration facilities might be constructed as flexibly and as demountably as possible; in this way changes in display surfaces, lighting, wiring, etc. can be easily effected.

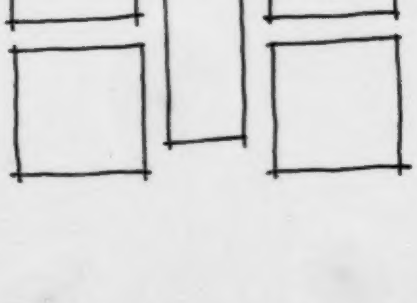
It is not as important that the Division Office and the Student-Teacher facility relate to a main corridor or lobby.

Other components to which the Demonstration and Training center could be related include:

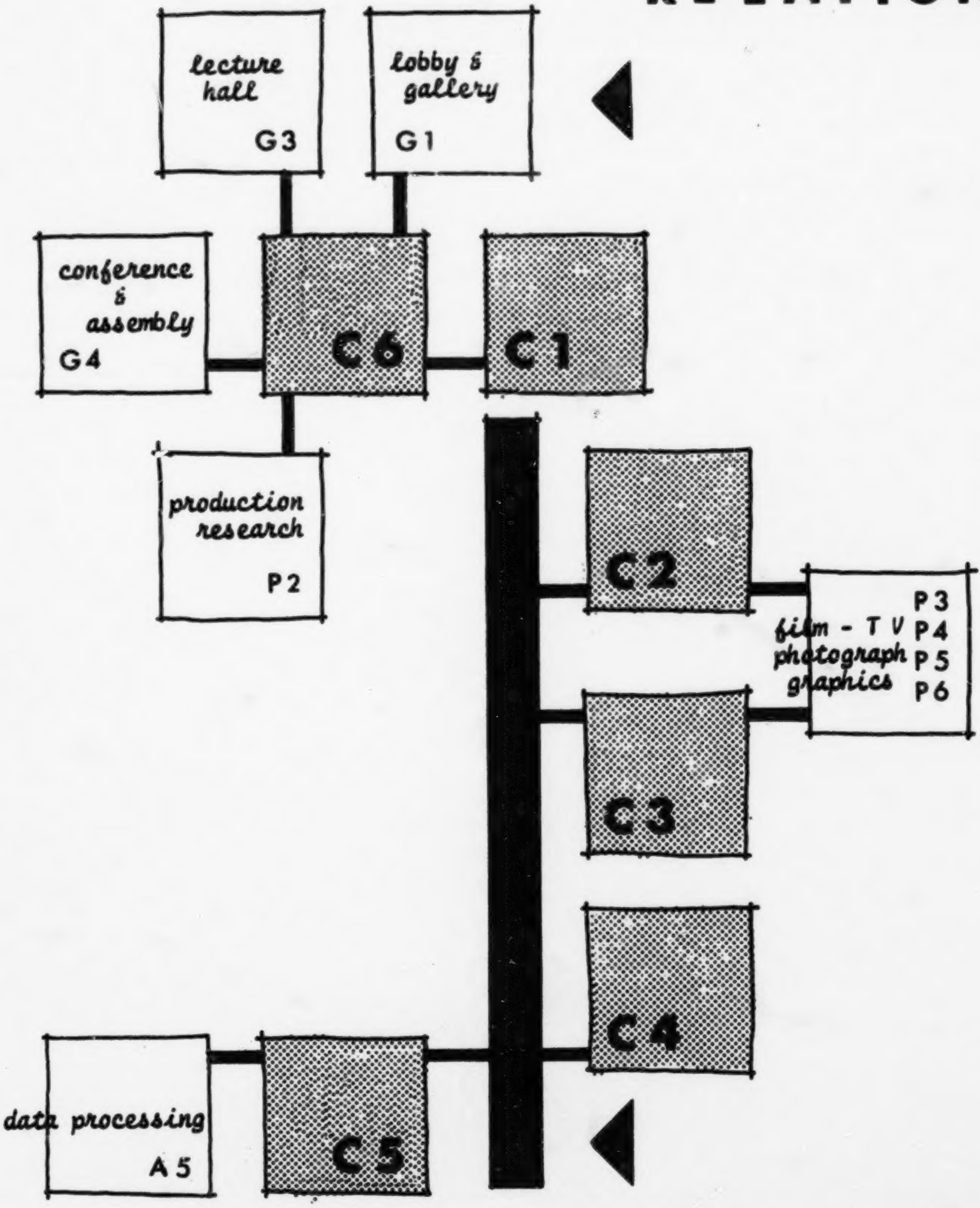
G - 1	General Lobby	
G - 3	Lecture Hall	The demonstration facilities are all together, and can be managed by the same technical staff
G - 4	Conference & Assembly	
P - 2	Production Research	

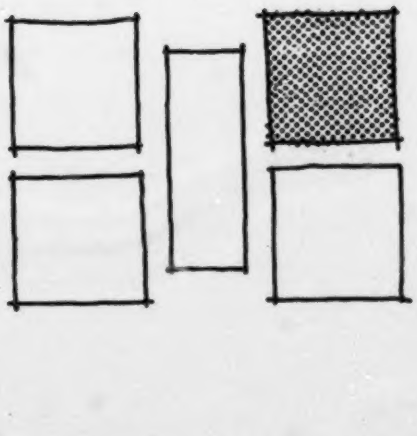
demonstration
and training **C 6**


demonstration classroom
storage
manager
ready area
conference
rear projection
demonstration classroom
director
assistant
student-teacher co-ordinator
student-teacher resource
supv
supv
supv
supv
conference



RELATIONS
C


lecture hall
G3
lobby & gallery
G1
conference & assembly
G4
C6
C1
production research
P2
C2
film - TV
photograph
graphics
P3
P4
P5
P6
C3
C4
data processing
A5
C5



ADMINISTRATIVE SERVICES

A FUNCTION

This component provides office and conference facilities for the co-ordinator of the department, and serves as an information center for those wishing to locate specific persons or places in the department.

B STAFF

The staffing is only co-ordinative, for most of the work and effort is accomplished in the various divisions. For this reason the staff will probably be limited to the department co-ordinator, any assistants, and the necessary secretarial and clerical staff.

C FACILITIES

Reception and Waiting

- serves as reception and waiting area for persons visiting the co-ordinative staff.
- serves as a general information office for persons looking for persons or places in the department.
- waiting furniture, and a desk for a receptionist.
- should be neat and well-appointed.
- should be the most accessible area in the department.
- possible "glass front" onto corridor or lobby to accentuate its importance as an information center.

Co-ordinators' Offices

- comfortable and well-appointed.
- directly accessible from reception area; directly or indirectly accessible from conference area.

Secretarial and Work

- houses secretarial staff for department use.
- should relate directly to reception area; and indirectly or directly to co-ordinators' offices.
- acoustically isolated from reception area.
- cabinets for storage.
- adjacent work room for machines, supplies storage, etc.

Conference Area

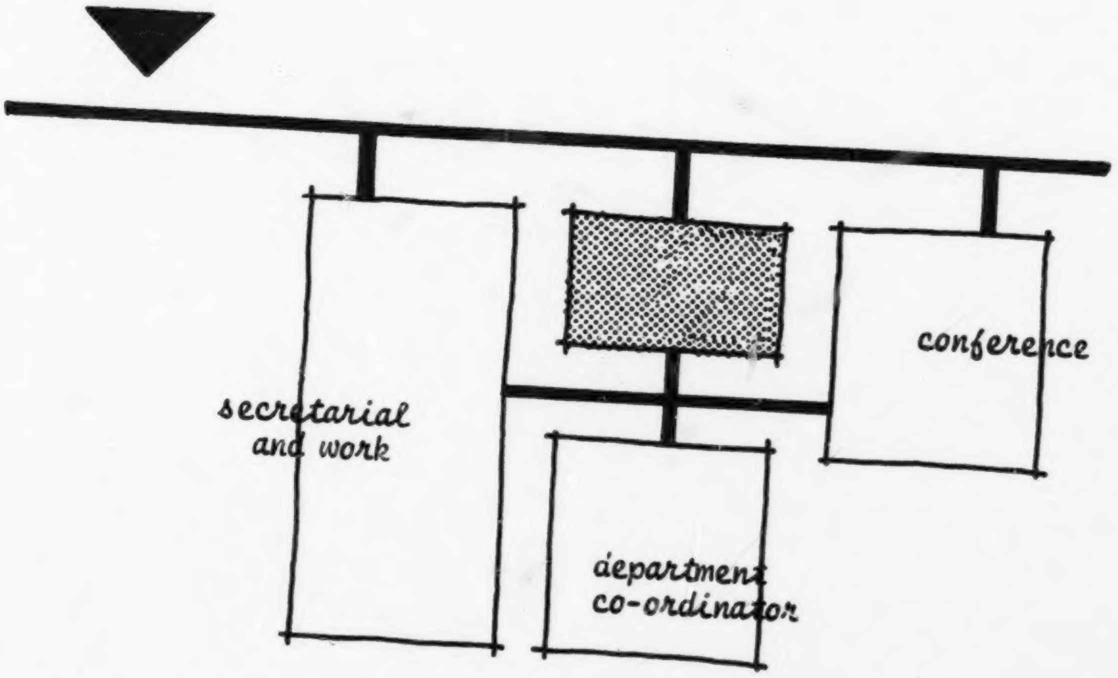
- serves department co-ordinators and, if correctly placed, can serve the entire department when needed.
- modular table units suggested for flexible arranging.
- generous write-on, tackboard, and display surfaces.
- outlets and jacks for many kinds of equipment.
- variable light levels suggested.
- carpeting a possibility.
- accessible to co-ordinators' offices.
- accessible from reception area and corridor.

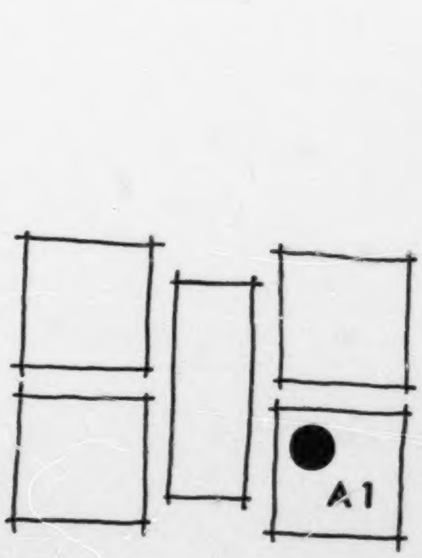
D GENERAL

The most important general point to make is the public use that this component is likely to get. Not only should it be comfortable and well-decorated, but it should be located near the main lobby or a major circulation path from the lobby. It should form a "gateway" to the department.

This unit should also relate strongly to the Regional Administration area (G-2) since there is likely to be a great deal of liaision between these two.

department office A 1


secretarial and work
conference
department co-ordinator



A FUNCTION

The task of the advisory services division can be the provision of a wide range of advisory and consultant services to . . .

district superintendents
principals and assistants
business managers
board presidents
board clerks
maintenance engineers
transportation offices

The types of services included might entail . . .

legal counsel and advice
process and auditing of budgets
completion of financial reports
advisory on required reports.
advisory of financial assistance, state aid, etc.
standard forms for calling meetings, etc.
clinics and workshops for board members
salary consultation and co-ordination
transportation advisory
maintenance advisory

To accomplish these tasks, the officers of this division will undoubtedly work closely with the regional executive officer (the regional superintendent).

B STAFF

Staffing will depend on the variety of services offered and the capabilities of individuals on the staff. A possible arrangement might include:

Director, advisory services division
Legal co-ordinator

Fiscal Co-ordinator
Audit and Control Co-ordinator
Transportation Co-ordinator
Maintenance Co-ordinator

C FACILITIES

Reception and Secretarial

- houses receptionist, secretarial and clerical staff.
- some waiting furniture, but this does not receive a great deal of public use.
- relate directly to corridor.

Director's Office
Co-ordinators' Offices

- house the various officers of the division.
- ample power-outlets for machines that may be used.
- relate to reception and conference areas.

Audit & Control

- a larger space to house this staff.
- ample power-outlets for machinery; special requirements for any bookkeeping machines used should be checked.
- possibility of computer key-punch equipment.
- hard floor suggested in order to move equipment.
- acoustical treatment to reduce equipment noise.
- relate to reception area.

Conference Room

- to serve staff members for discussions, meetings, etc.
- special presentation equipment not necessary.
- may be shared with other components.

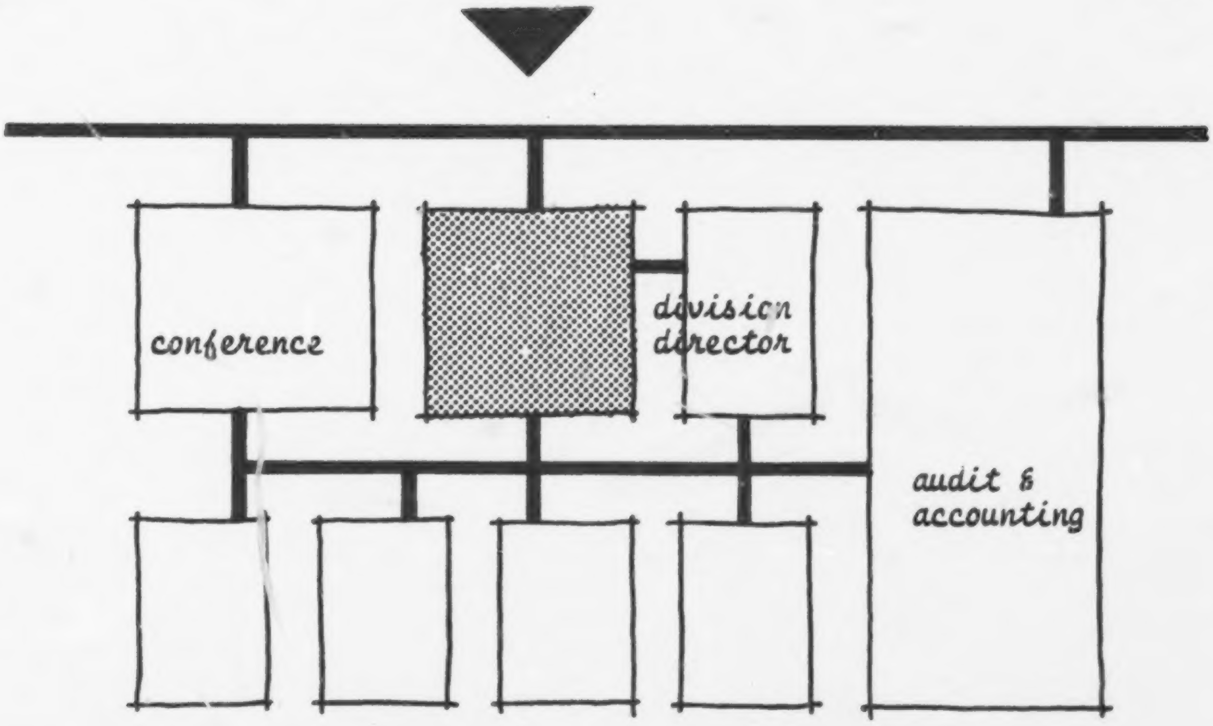
D GENERAL

This component will not receive much public use, so it need not be related to a major circulation path. It should, however, be closely related to the Regional Administration Office (G-2). Other less direct relationships may exist with:

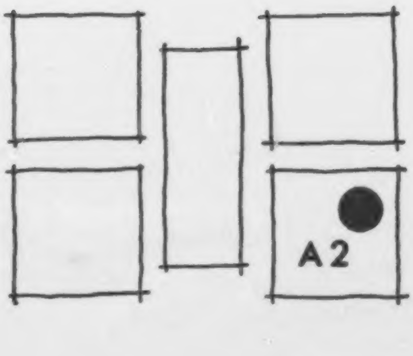
A - 4 Purchasing Office

A - 5 Data Processing Center (preferably on the same level for cart-wheeling of cards, etc.)

advisory services **A 2**


conference
division director
audit & accounting

co-ordinators offices: legal, fiscal, transportation, maintenance



A FUNCTION

The personnel office can confine its activities to the screening of candidates for positions at the Center, or it it can expand to provide certain personnel services to member schools and organizations, such as . . .

central writing of job specifications
central filing, receiving and processing of applications
central interviewing
central recruiting operations

There is a good chance that all member schools will not want to avail themselves of these services; central recruiting but local interviewing (or other arrangements) might be considered more favorable.

B STAFF

Staffing can be large or small, depending on the scope of the divisions services. Possibilities include:

Director, personnel division
Regional co-ordinator) one of which may be
Local co-ordinator) the division director.
Interviewing and/or recruiting staff as necessary.

C FACILITIES

Reception Area

- houses receptionist and waiting furniture.
- should be pleasant, informal, and non-institutional in appearance.
- neat and well-appointed, but not necessarily plush.

- natural light preferred.
- adjacent clerical and work area, acoustically isolated.
- relate directly to main circulation path, component must be "easy to find."

Director's Office
Co-ordinators' Offices

- house director and staff; may be used for interviewing.
- neat and well-appointed.
- natural light preferred.
- acoustically isolated from one another.
- relate directly to reception area.

Interview Rooms

- small but neat rooms for interviewing candidates.
- cheerful and colorful atmosphere suggested; carpeting.
- couch-and-armchair might be preferable to traditional "over-the-desk" interview arrangement.
- should not look like cubicles in a row, if possible.
- natural light preferred.
- easy, non-torturous access from reception area.

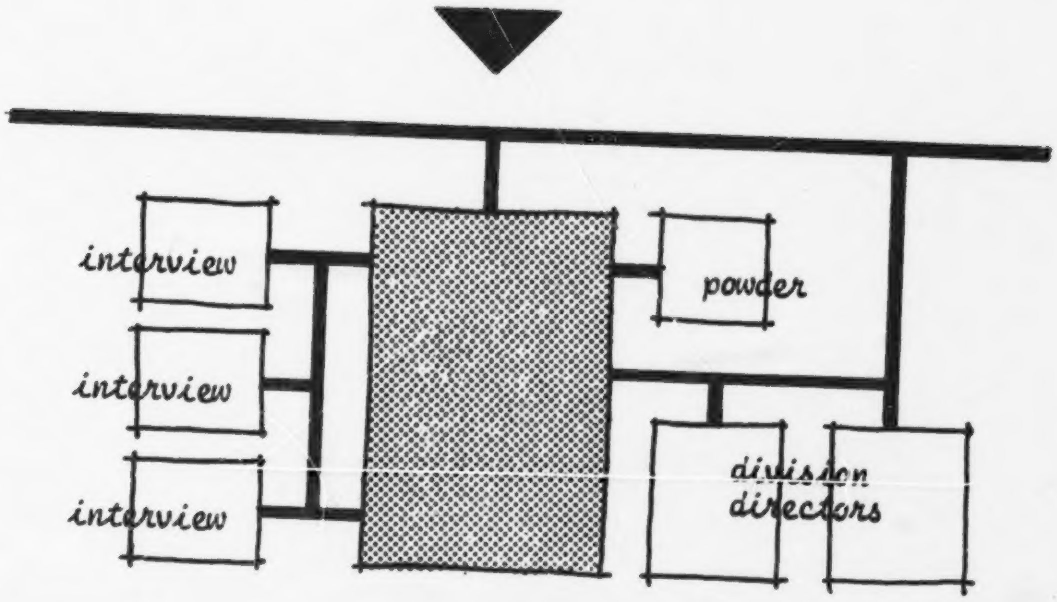
Powder Room

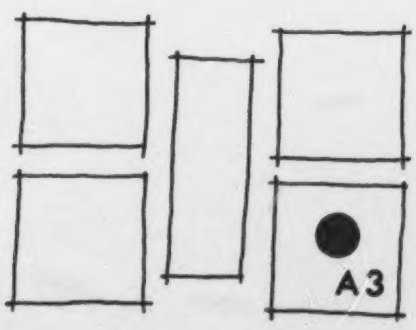
- for use of women candidates and visitors.
- contains normal toilet-washroom equipment; large mirror.
- relate directly to reception area.

D GENERAL

Particularly if interviewing is going to occur in the center, it becomes important that this component is both easy-to-find and informally attractive.

personnel office **A 3**


interview
interview
interview
powder
division
directors



A FUNCTION

Regional co-operative bidding and purchasing of many kinds of supplies -- instructional, custodial, cafeteria, transportation -- has been by many districts in the past few years. This division could:

process and co-ordinate requisitions from members
write specifications
advertise for bids
open and handle bid awarding
provide central accounting and processing services
handle all purchasing for the Center

B STAFF

The staff for this division will probably include a director, an assistant (if the purchasing operation is at all large) and a work staff to process requisitions, invoices, payment slips, etc. The center's computer may be used to relieve some of the routine burden from this office.

C FACILITIES

Reception and Waiting

- houses receptionist-secretary and waiting furniture for a few persons (salesmen, those awaiting bid openings).
- direct access to corridor or major circulation path.
- direct access to remaining areas in component.

Secretarial and Work

- area for processing and work operations.
- adjacent to but acoustically separated from reception area.

- ample power outlets for machinery.
- may contain data card punching and/or sorting equipment.
- access to offices.

Director's Office
Assistant Director's Office

- area for work, interviewing, conferring with school officials, salesmen, etc.
- direct access to reception and secretarial areas.

Conference Room

- used for opening bids on small projects. Larger contracts probably will be opened elsewhere in the Center.
- extensive presentation media not necessary.
- access to corridor and reception areas.

D GENERAL

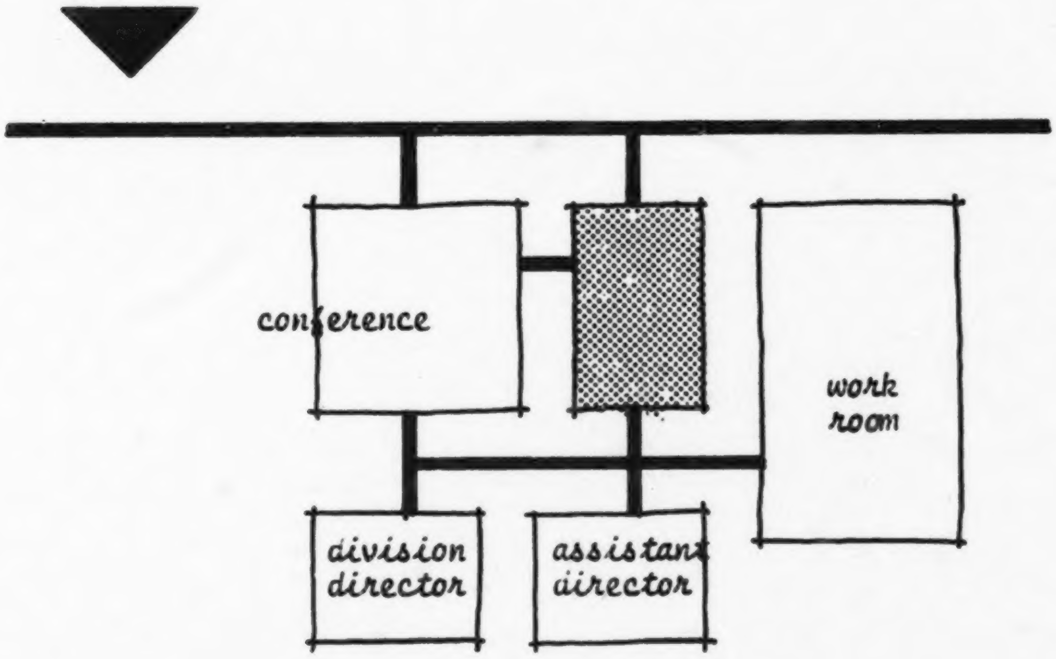
If the purchasing office plans on receiving and opening bids in its own facility, this component must be placed so that it is "easy to get at." If not, such prominent placing may not be quite so important (although there will be a number of salesman-visitors).

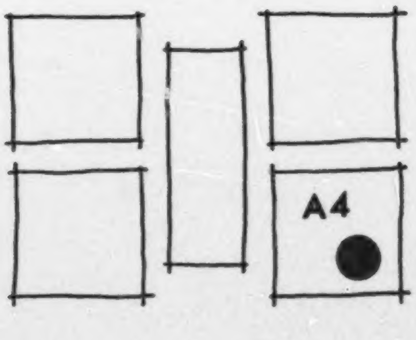
Related components may include:

A - 2 Advisory Services (particularly the audit and control section).

A - 5 Data Processing Center (need not be a direct relationship, but probably should be on the same level to allow easy card-carrying cart access).

purchasing office **A 4**


conference
work room
division director
assistant director



A FUNCTION

The use of computers in many different areas of education is rapidly becoming a fact of life. What started as a small effort to remove some of the routine work from staff members has expanded into . . .

scheduling and registration
tracking progress through school
instruction
information storage and retrieval
test scoring and interpretation of results
library operations
attendance and tardiness records
payroll and employer routine
inventory-control, bookkeeping, budgeting
statistical evaluation, utilization studies ,etc.

Just which of these services the Center will want to provide is a variable thing. The chances are that it will start out on a small scale doing routine work, slowly moving into more extensive endeavors.

In the beginning, the center may not need to own or rent its own computer -- it may be more economical simply to prepare materials for computer use and rent time on an industrial, university, or other available computer. The problem with "shared time," however, is the basic theorem that any one computer can only be programmed to do so many things. As its scope of operations expands, the center will probably want to secure its own computer system which it can program exclusively for its uses.

The type of computer or computer system is again a matter of individual choice. If the center plans to handle a wide range of computer services (such as those mentioned above) it may find that using only one computer will require that it have an extremely large memory; in this case, it might become more economical to install two or three smaller-memory systems which specialize in a particular group of services (administrative routine, instruction, information, etc.). Even if the center chooses not to install its own computer, it will still need staff and space for scheduling, preparation, keypunching and read-out.

In the case of data processing and using computers for instruction and information services, the regional board is advised to investigate "the state of the art" at the time it wishes to build -- with the speed of developments in the computer field, it is hard to say what will be the best way to do the task.

Finally, the data processing staff can do much more than simply operate the machinery. There will be a great need for in-service work with teachers and administrators in the region.

B STAFF

The staff requirements will naturally vary with the scope of services the center wishes to provide. The staff of a full computer operation will probably include:

Director, data processing division
Operations Manager
Programmer
Key punch operators
Operations staff.

It would seem logical that regular pick-up and delivery of data cards, printouts, etc. (if no wire transmission such as dataphone is used) can be handled by the same delivery staff that handles pick-ups for the central collections division in component R-5.

C FACILITIES

Director's Office

- houses division director and operations manager.
- used by visitors to the component.
- large display wall for scheduling may be employed if no separate scheduling area is included.

- glass vision panel into scheduling area a possibility.
- direct access to scheduling room and the rest of the component in general.
- direct access to corridor or circulation space.

Scheduling/Control/Staging Area

- serves as headquarters for scheduling, analysis and programming work.
- large display wall for a schedule board.
- generous tackboard and write-on surfaces.
- much table-top work area.
- acoustical treatment may be needed.
- acoustically isolated from punch and computer areas.
- vision panels to office, punch, and computer areas.
- direct access to office, punch, and computer areas.
- doors to all areas wide enough for carts.

Punched Card Area

- houses machinery for keypunching and card preparation.
- would probably contain printout equipment if a remote computer were utilized.
- vision panels to scheduling and computer areas.
- acoustical treatment needed.
- wide-door access to scheduling and computer areas.

Computer Room

- houses actual computer machinery.
- design should be based on layout of system or systems to be installed; manufacturers will provide layout diagrams and assistance.
- floor must be level.
- floor may be raised in accordance with manufacturer's specifications (both for wiring flexibility and to contain underfloor exhaust systems).
- heat removal from machines must be accomplished.
- air conditioning and filtration required.
- illumination standards of 50fc; daylight not suggested.
- acoustical treatment suggested.
- vision panels to punch and scheduling areas.
- wide-door access to punch and storage areas.

Storage Area

- houses materials for use; and processed materials awaiting shipment.
- relate to whole division and to loading or receiving area (or elevator).
- ventilation, temparature and humidity requirements for cards and tapes will be fulfilled.
- double door access.

D GENERAL

If the computer is housed in the center, each of the spaces presented above should be incorporated into the center; the chances are that if the actual computer is not to be at the center, only the computer room per se can be done away with. No matter what approach is taken, the component should be located in the building so that it has a chance to expand when demands increase.

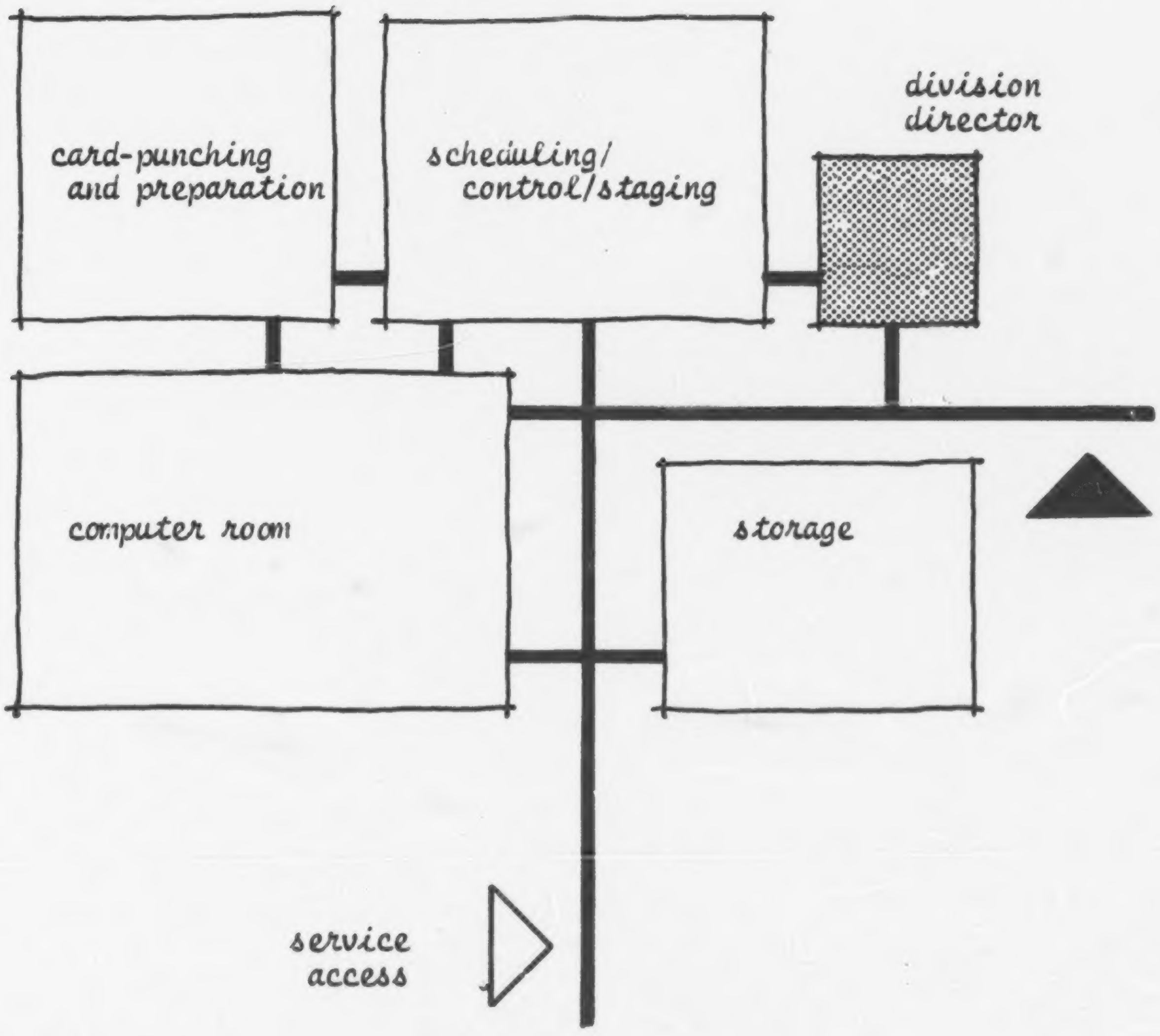
The data processing center should relate fairly closely to the central receiving component (G-7) for shipments of materials, etc. All other relations may be direct pr indirect,(depending on how data gets from the originator to the center; if dataphones are used, there need be no physical relation of any other component to the data processing center. If cards and printouts are to be transferred from place to place via carts, these relationships may have to become stronger. In any case, these components will probably make the most use of the computer facility:

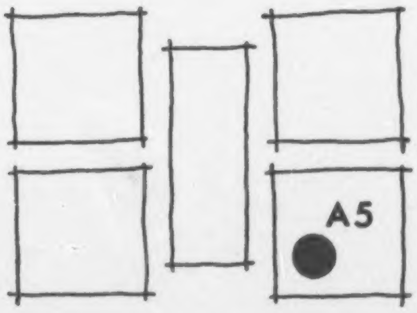
R - 3 Search and Bibliographic
R - 4 Acquisitions Center
R - 5 Central Collections

C - 5 Pupil Personnel Services

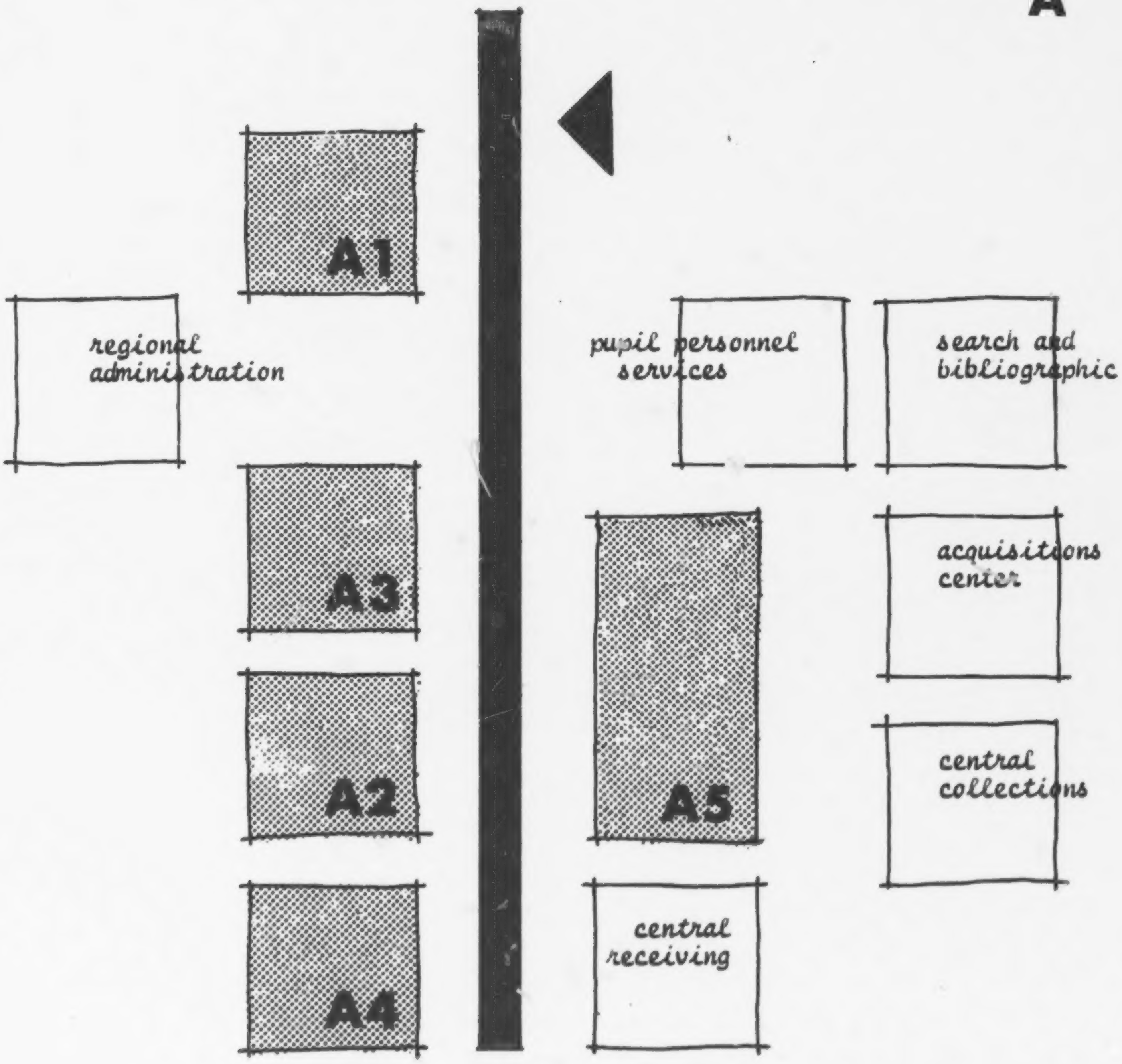
A - 2 Advisory Services
A - 4 Purchasing Office

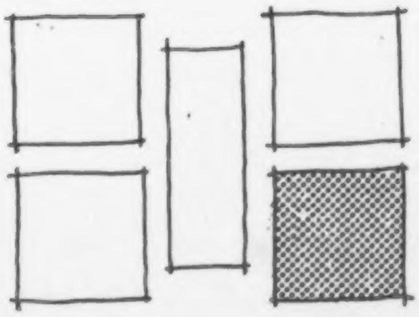
data processing center **A 5**


card-punching
and preparation
scheduling/
control/staging
division
director
computer room
storage
service
access

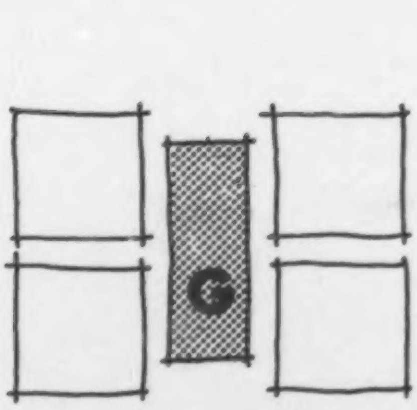


RELATIONS
A


A1
regional administration
pupil personnel services
search and bibliographic
A3
acquisitions center
A2
A5
central collections
A4
central receiving



GENERAL



A FUNCTION

The main lobby of the building will serve to "introduce" both visitors and regular personnel to the center and the philosophy behind it. As such it cannot be passed off as necessary but useless space between the front door and the first office. It will be used to:

- collect and logically distribute regular and irregular visitors to the various portions of the building.
- act as a central tie between the physical parts of the center.
- act as a "receptionist" in that it is the first part of the center seen by the visitor.
- act as a "showplace" for exhibits, displays, etc. of materials, methods, exhibitions, equipment, etc.

B STAFF

As such, this component needs no staff of its own. Displays may be arranged through the Regional Administration Office (G-2) or the Demonstration Center (C-6).

C FACILITIES

Lobby and Gallery

- first space in the building for persons using the main entrance.
- "wind-trap" vestible suggested at entrance point.
- receptionist-iformation desk handy to doors.
- seating benches, alcoves, etc. may be employed.
- wall display areas for exhibits, examples of student work, etc.

- gallery area should probably be incorporated right into the lobby area, rather than be a separate room.
- open, airy space.
- wearable floor surface suggested (such as terrazzo).
- structural (not suspended) ceiling recommended if spring-type poles might be used to make displays, wall off certain parts of the lobby, etc.
- electrical outlets in both walls and floors suggested.
- intimate lighting preferred over institutional types.
- variable (modular) lighting control so that different areas in different parts of the lobby can receive different lighting levels.
- outlets for special spot lighting suggested.
- adjacent toilets.
- adjacent circulation corridors, stairs, etc.
- a logical circulation path: in, out and through.

D GENERAL

Many circulation paths in the building will probably cross in the lobby area; the architect must give a great deal of thought to unscrambling and ordering these paths so that lobby circulation will be "logical."

Most of the center's more public facilities should be grouped around the lobby area, particularly for use at night when the rest of the building may be closed.

Access priorities to the lobby will be noted in Chapter 9. In general they read:

FIRST PRIORITY:	G-3	lecture hall
	C-6	demonstration center
SECOND PRIORITY:	G-4	conference and assembly
	G-5	cafeteria and kitchen
	G-2	regional administration
THIRD PRIORITY:	R-1	resource services office
	P-1	production services office
	C-1	curriculum services office
	A-1	administrative services office

A FUNCTION

This component can house the various aspects of regional administration:

Office and conference facilities for the regional board (or whatever its official title may be), its president, clerk, and treasurer.

Office and conference facilities for the region's executive officer, the Regional Superintendent (or whatever his title may be).

Office and conference facilities for the Regional Services Director (the executive officer of the center), his assistants and his staff.

B STAFF

The actual make-up of the regional administrative staff, the titles of the various positions, and the delegation of responsibility among them will have to be worked out in detail by the individual region. The following were selected only for presentation purposes:

REGIONAL BOARD -- the administrative authority of the region, consisting of lay members elected from the various organizations participating in the center. In general it oversees the appointment of, or appoints directly the Superintendent and the Services Director. Each region may have variations on this as the legal structures permit.

REGIONAL SUPERINTENDENT -- the region's executive officer who handles policy decisions and promotes district-region relations.

REGIONAL SERVICES DIRECTOR -- the individual responsible for the service aspects; he would be the principal officer of the Regional Service Center and responsible for its continuing operation.

C FACILITIES

Reception and Waiting

- can serve as a central reception and waiting area for all offices in the component although it will probably find its most frequent use as a waiting area for the Regional Services Director and his staff.
- comfortable lounging furniture, desk for a receptionist.
- neat and well-appointed.
- natural light suggested.
- carpeting suggested.
- air conditioning (like the rest of the component) is a possibility.
- prominent position in the center, direct access to main lobby, circulation area, or main stair.
- should relate directly and indirectly to all other areas in the component.

Secretarial and Work

- provides secretarial and typing services for all offices in the component, but should relate the closest to the Regional Services office.
- acoustical isolation from reception area.
- adjacent work room with counter-top area and space for office machines.
- adjacent fireproof records vault.

Regional Services Directors' Offices

- large, comfortable and well-appointed.
- natural light preferred
- direct access to reception and waiting areas.
- adjacent coat room and toilet suggested.

Conference and Board Room

- serves as a conference room for all areas in the component and as a meeting room for the regional board.
- need not be too large (around 15 persons); any public board meetings may be held elsewhere in the center.
- comfortable and well-appointed.
- generous write-on, tackboard and display surfaces.
- map rail for regional maps, charts, etc.
- carpeting suggested.
- access to corridor and board offices.

Regional Board Offices

- inter-related offices for board president, clerk, and treasurer.
- board clerk's office should have the most direct access to the corridor and board conference room; other offices might in turn open onto this space.

Regional Superintendent

- houses regional superintendent and secretary.
- separate reception and waiting area probably not necessary.
- relate to corridor.

D GENERAL

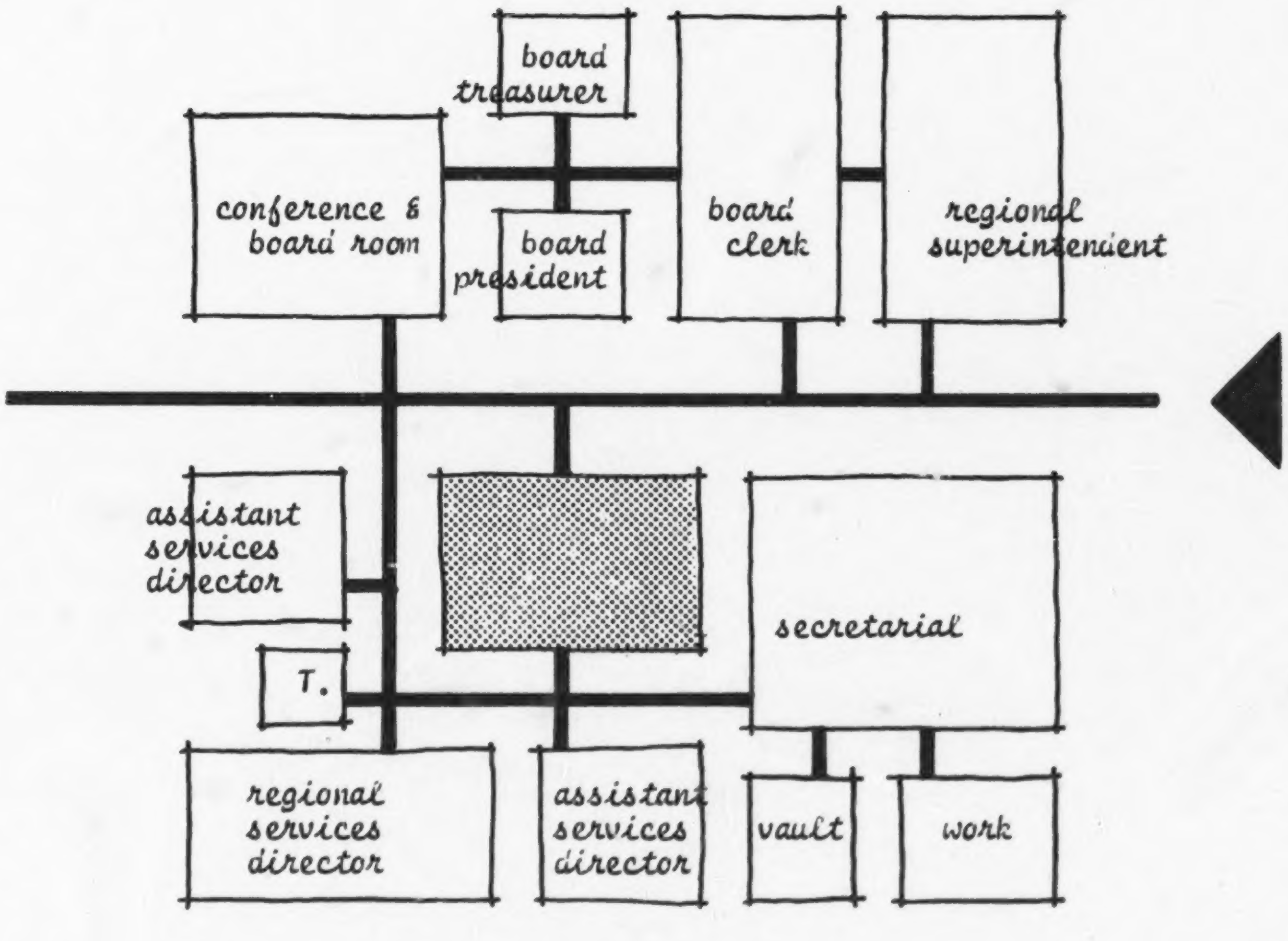
While this component is not the most important area in the center as far as public access is concerned, it does rate highly. It might be considered as a second-story element just off and above the main lobby area.

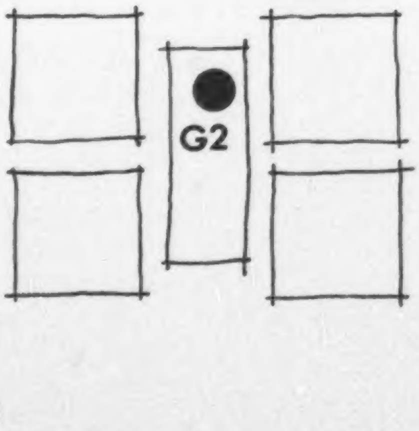
Related components include:

R - 8 Regional Research (these should be physically closely related since there will be strong ties between the two).

A - 1 Administrative Services Department Office
A - 2 Advisory Services
A - 3 Personnel Office
A - 4 Purchasing Office

(there will be a great deal of liaision between the Regional Administration Offices and the Administrative Services Department in general, so these components should be conveniently located, one to the other).


board treasurer
conference & board room
board president
board clerk
regional superintendent
assistant services director
T.
secretarial
regional services director
assistant services director
vault
work


G2

A FUNCTION

The lecture hall should be designed to accommodate large-group meetings, demonstrations, training sessions, and other presentations. It will probably receive its greatest use from center-sponsored activities, but it is conceivable that the center may choose to make it available to professional groups and the public at large.

The lecture hall need not seat a large number of people, large-scale presentations can be given elsewhere. Making the facility over-large reduces its utilization rate, and the cost of lecture rooms does not permit them to stand idle 90% of the time.

This facility should be designed to accommodate as many of the new and old types of presentation methods as possible. Not only can the lecture room be used as a demonstration area, but constant use of new methods can help prove their value to the lay teacher or staff member.

Finally, the lecture hall should be given a prominent location in the center, preferably adjacent to the main lobby. It may even be expressed architecturally as a separate building element.

B STAFF

The staff required to manage the lecture hall will probably be shared with other components in the center. Scheduling and management may be controlled through the Regional Administration office (G-2) or the Building Services office (G-6). Technical support and management can be supplied by the same staff that mans the demonstration areas (C-6).

C FACILITIES

Lobby Area

- used as an ante and intermission area for lecture hall.
- easy access to building exits.
- probably should be a "nook" off the main lobby (G-1) so it can be visually connected to it, but also can give a certain sense of enclosure and privacy.
- benches or seating alcoves may be provided.
- movable coat racks or coat room should be provided.
- medium-level lighting (10-15fc) satisfactory.
- telephone jacks may be useful if this area is to be used as a registration/reception area for conferences.
- toilets should be adjacent to lobby area.

Lecture Hall*

SHAPE
- should be designed in accordance with acceptable viewing depths and angles. These are derived from dimensions of screens and display surfaces in the lecture hall, and the number of people to be seated. It should be noted that:

  VIEWING ANGLE of 40° as shown on the diagram is a maximum condition and must be adhered to. Decreasing this angle will give a distorted view to people off-to-one-side of the screens.

  MINIMUM DEPTH is generally twice the width of the individual screen (2W). Placing spectators closer than this puts them too close for visual comfort.

  MAXIMUM DEPTH is determined from the ability of far-away spectators to read material on the screen. It varies from six times the screen width (6W) in smaller rooms to 7W and 8W in larger rooms.

- parallel walls should be avoided for acoustical purposes.
- sloping floor generally suggested (except in small rooms).

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* Standards for design of large-group spaces are covered in detail in New Spaces for Learning, Design Criteria for Learning Spaces and A Bulletin Outlining Planning and Design Criteria for Communications and Lecture Hall Centers. (see (bibliography).

DISPLAY AREAS
- should include rear projection screens. The number and size of these will vary as the capacity of the room. Since screen size determines ideal room dimensions, this should be checked first. (see note*)
- write-on surfaces a possibility, but should be avoided in rooms of any size
- adjacent tackboard area suggested.
- overhead projection equipment can be built into lecturn.
- electrically-operated front projection screen for the overhead projector.
- overhead or rear-screen TV projector suggested.
- TV monitors may be used (if no TV projection).

LECTURN
- bottom and top-lighted display surface.
- easily read clock, and possibly a timing device.
- control of TV, slide, and film projectors. House light levels for each of the projection methods should be pre-set and activated by the same controls used to operate the projectors.
- control of all movable screens.
- control of overall lighting levels.
- monitor control to technician area.

SEATING
- individual or bank types up to individual choice.
- should be comfortable.
- some provision for writing surface should be made. (continuous table top a possibility).

MECHANICAL
- variable lighting (5fc, 15-20fc and 40-50fc ranges).
- maximum of 1fc ambient light on projection surfaces when they are in use.
- amplification system (for recorded sound; amplification for the speaker should not be necessary except in the largest lecture spaces).
- air conditioning required.

ACOUSTICAL
- carpeting suggested.
- wall and ceiling treatment as needed.
- "sound locks" or alcoves at entrances may be helpful.
- avoidance of parallel walls.

ACCESS
- public access preferably from the rear.
- direct access to technician-rear projection areas.
- direct access to preparation and storage areas.

Rear Projection Area

- size and shape determined by the number and size of screens. Width need not exceed the total width of the display screens; depth should not be less than the distance the projector must be from the screen in order to throw an image that will fill it.
- indirect (mirror-reflecting) projection not at all recommended for TV.
- either flexible or rigid screens may be used.
- drapes suggested to cover screens when not in use.
- 25-40fc lighting, with pin-point lighting over equipment positions for local work.
- dark colors suggested to keep reflections down.
- fixed equipment locations will be necessary, but movable stands are suggested for flexibility.
- adequate exhaust and ventilation needed.
- should be monitored to lecture hall lecturn.
- wide-door access from corridor recommended.
- acoustical treatment needed to absorb projector sounds.
- accessible from technicians areas.

Preparation Area

- storage and preparation of presentation materials, carts.
- double door access to lecture hall and corridor.
- may also act as an ante room for speakers.

Technician Area

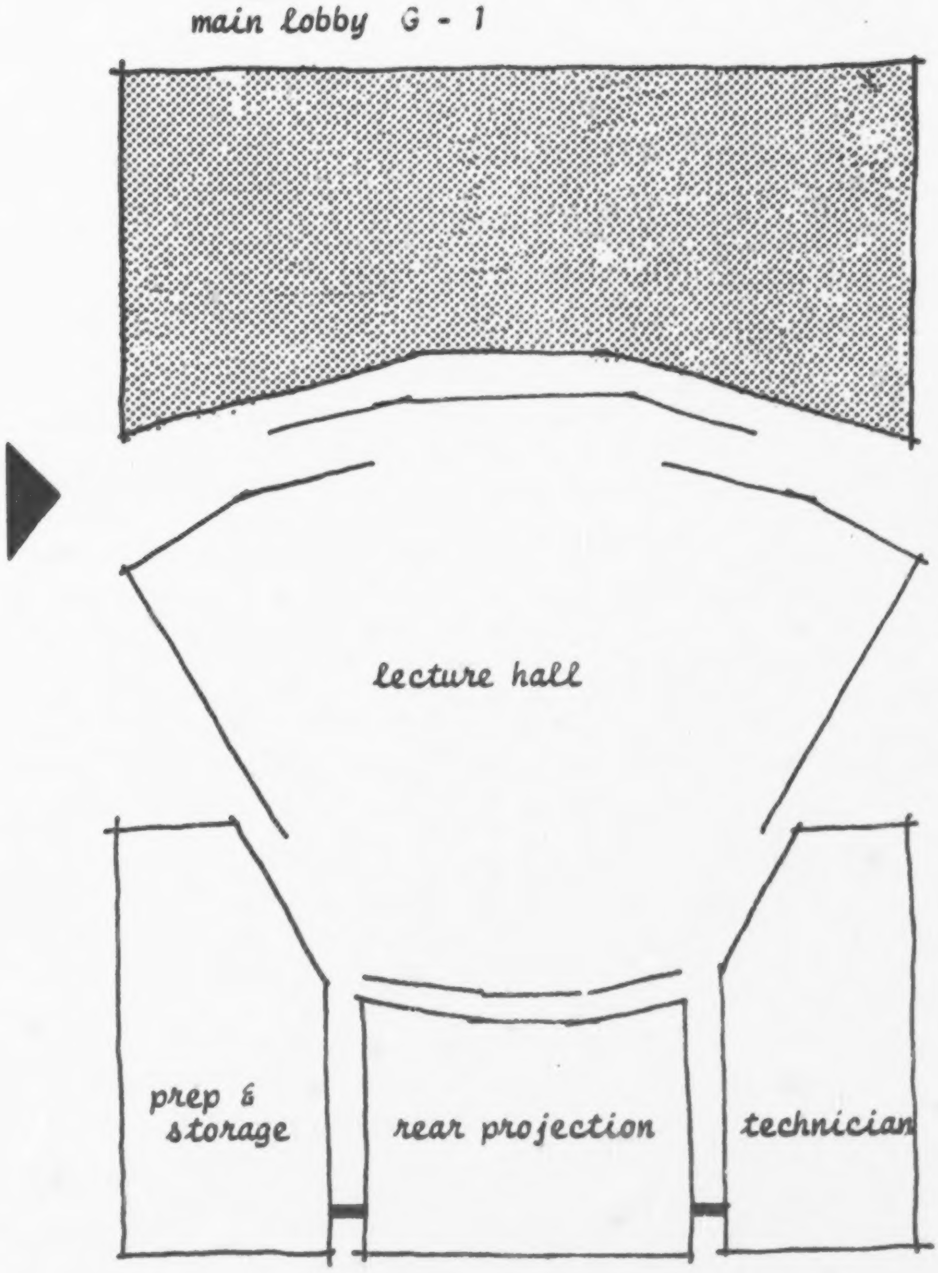
- allows for technical work, make-up, modifications, etc. that take place out of the rear projection area.
- may be a section of the preparation area.
- wide-door access to rear projection areas.

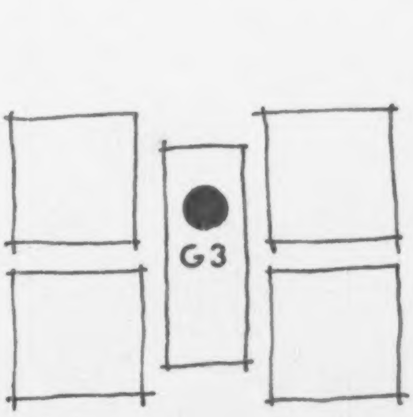
D GENERAL

This facility is, among other things, a showcase of methods, materials and equipment for the region. It should not give an aura of plushness, but the lecture hall should be comfortable, well-appointed, and an enjoyable space to be in.

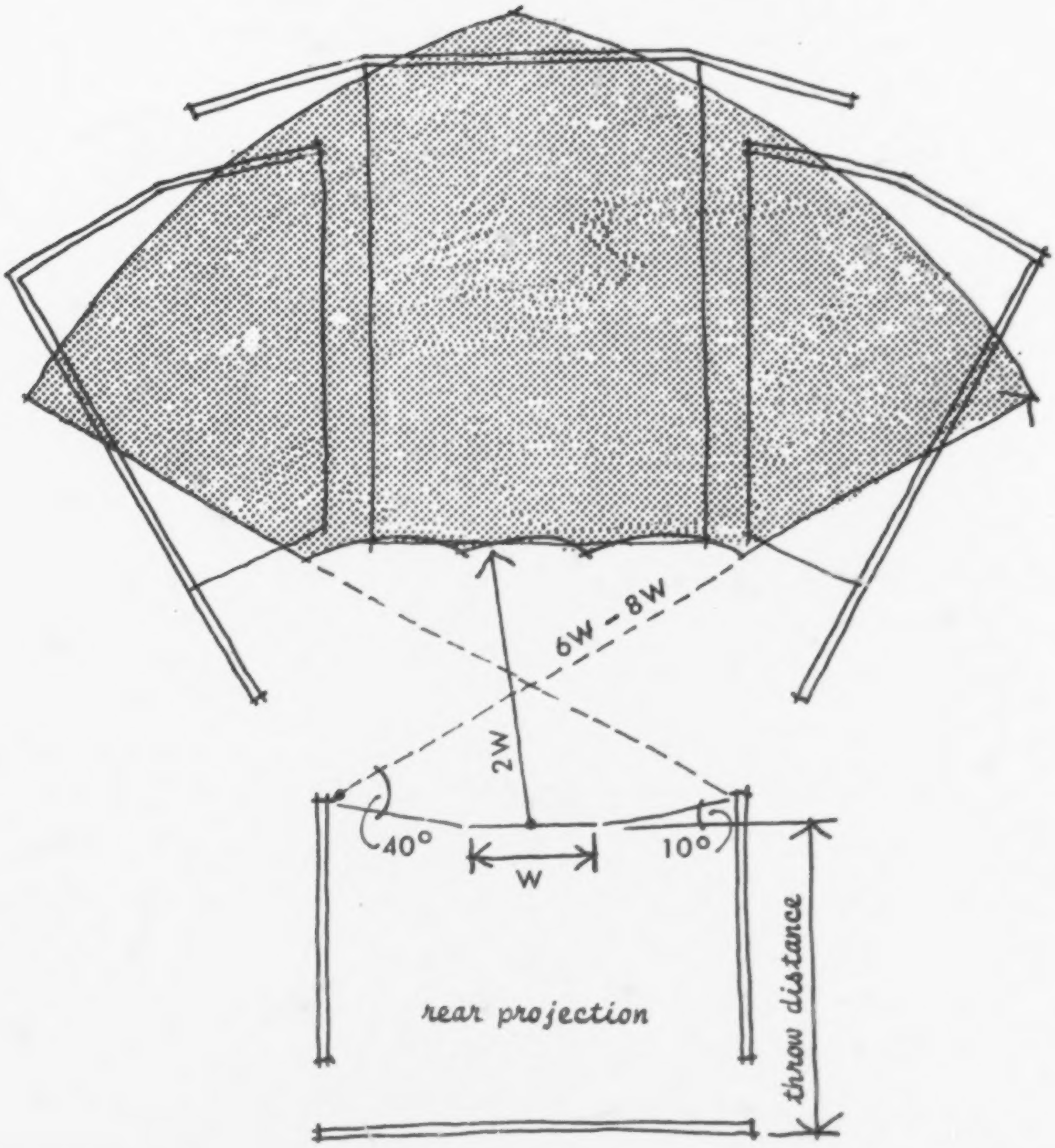
It should relate directly to the main Lobby and Galler (G-1) and indirectly to those components which carry on demonstration functions (demonstration and training C-6, conference and assembly G-4) so the same technical staff can serve all. It should have a close relation to the cafeteria (G-5) for use during meetings and conferences.

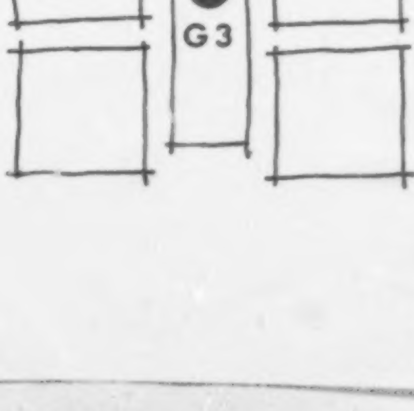
lecture hall **G 3**


main lobby G - 1
lecture hall
prep & storage
rear projection
technician



lecture hall **G 3**


6W – 8W
2W
40°
10°
W
rear projection
throw distance



A FUNCTION

The conference and assembly area can be provided in the center to handle a great many functions: meetings, receptions, forums, discussions, study council sessions, professional group meetings, colloquia and other get-togethers. Since these demands are so flexible and changing, the facilities to accommodate them should recognize this fact "in a big way."

B STAFF

No staffing is required to operate these areas; their use can be controlled through the regional administration office (G-2) and technical support can be provided by the demonstration center (C-6) technician.

C FACILITIES

Assembly Area

- a large, possibly divisible area for many functions. large space might be 20'x 60' divisible into 3 rooms.
- each area should have separate access and lighting control.
- motorized front projection screen suggested at one end.
- might even be a movable partition between this area and the main lobby, to use this area as an alcove.
- variable lighting levels recommended.
- total darkining (down to 1 to 1.5fc of ambient light on projection screens) suggested.
- possibility of exhibit lighting should be considered.
- modular table units suggested for flexible arrangements.
- TV jacks and ample outlets suggested.
- multiple-ceiling-speaker sound system suggested for large-group use.
- coat space for each section is required.
- adjacent equipment storage area.
- adjacent chair and table storage area.
- should relate directly to main lobby (G-1) if possible.

Conference Room(s)

- designed to house 15-25 people, number and size will vary with the individual center's needs.
- designed to house important conferences, seminars, etc. while not necessarily plush, they should be well appointed and comfortable.
- interior space (no natural light) suggested.
- variable lighting levels suggested.
- 100% darkening (minimum standard of no more than 1 or 1.5fc of ambient light on projection screens).
- modular tables suggested for variable arrangements.
- generous tackboard and display surface.
- rear projection screen (perhaps wide enough to accommodate two full images).
- TV jacks and sound system suggested.
- carpeting suggested.
- air conditioning required.
- adjacent rear projection area.
- adjacent chair storage area (may be shared with the assembly area).
- should relate directly to main lobby (G-1) if possible.

D GENERAL

This unit should be located just off the main lobby and "right in the middle of things" as far as the center's circulation is concerned. It will receive use from many different persons and groups, and should be easily accessible to all of them.

Related components may include:

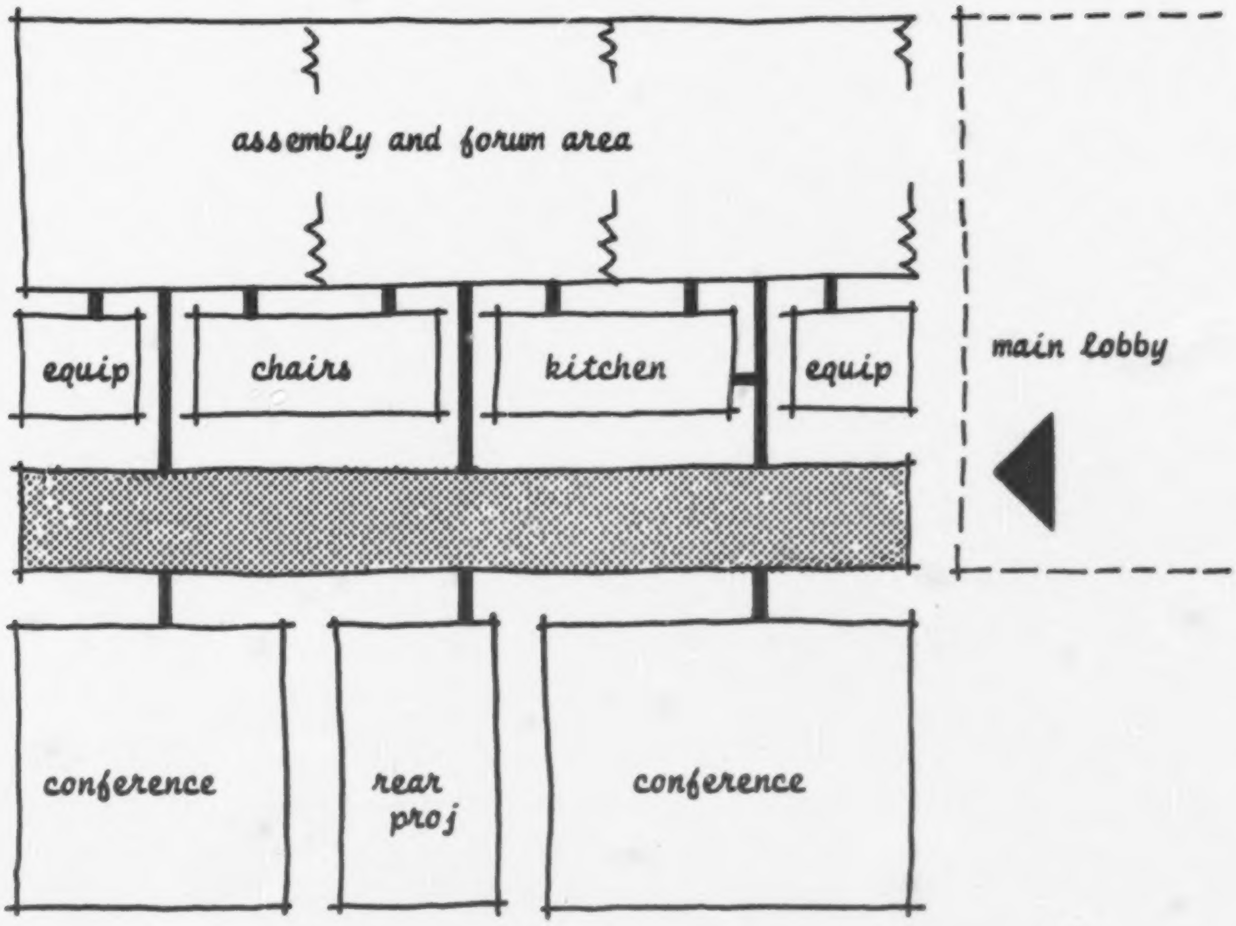
G - 1 Lobby and Gallery

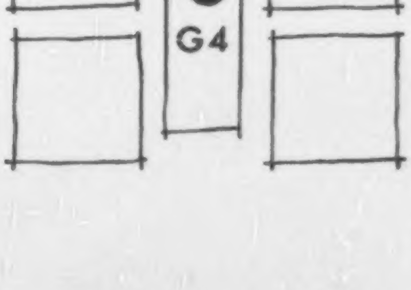
C - 6 Demonstration and Training (if the technician is the manage both units).

G - 5 Cafeteria and Kitchen

G - 3 Lecture Hall (nearby so that large conferences using both lecture hall and confereance and assembly facilities will not be scattered all over the building).

conference and assembly **G 4**


assembly and forum area
equip
chairs
kitchen
equip
main lobby
conference
rear proj
conference



A FUNCTION

The kind of dining facilities that the service center may want to provide is an individual matter. They may run the gamut from . . .

- no dining facilities at all, leaving staff and visitors to bring lunches or eat out.
- small kitchenette facilities for coffee and special events, with or without an actual dining area.
- kitchen facilities specializing in cold lunch preparation for staff and visitors, used on occasion for hot dinners.
- complete kitchen and dining facilities preparing hot meals for staff and visitors on a daily basis. For additional use and income, the center may even encourage outside use of these facilities for banquets.

The following discussion will assume the center wishes to provide hot meals on a daily basis.

B STAFF

Staffing will vary with the scope of the service and the average number of employees and guests in the center at noon time. A cafeteria manager with the necessary preparation and clean-up staff would be a logical assumption.

C FACILITIES

Large Dining Area

- provides tables and chairs for eating center-prepared and staff-brought lunches.

- a restful, intimate atmosphere is suggested.
- modular tables for variable arrangements suggested.
- natural day-lighting should be considered.
- fair acoustical isolation from kitchen area.
- direct access from corridor, but main access through serving area.
- convenient access to dish return area.

Small Dining Room(s)

- serves same function as main area, but can accommodate smaller groups, seminars, etc.
- should be a part of the main area when partititions are opened.
- easy access to serving area.
- direct access to corridor.
- ample outlets and darkening suggested.

Kitchen

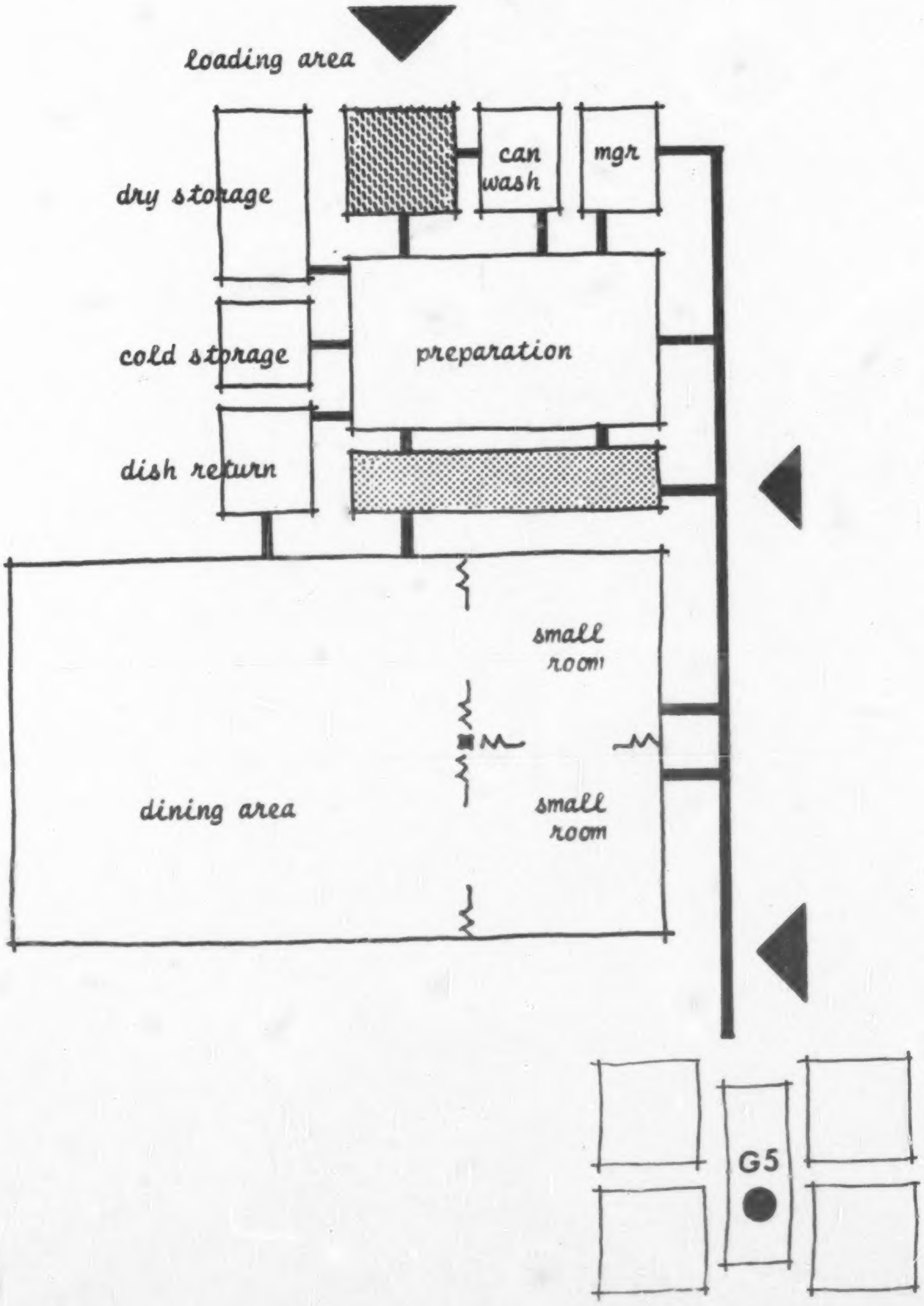
- preparation area
- serving area
- dish return area
- cold storage area
- dry storage area
- can wash and garbage room
- loading area
- managers office

information on kitchen layout and design can be found in a number of standards and equipment manuals and are not discussed here.

D GENERAL

The cafeteria and kitchen should be located so that it is fairly accessible to the rest of the center, and particularly so to the lecture and conference components (G-3, G-4 and C-6) grouped around the main lobby.

The kitchen will probably require its own small loading dock and service access.


loading area
dry storage
can wash
mgr
cold storage
preparation
dish return
small room
small room
dining area
G5

A FUNCTION

This is not really a cohesive component at all, but rather a collection of staff and facilities necessary to operate the physical plant from day to day. It may include:

- switchboard operators and switchboard room to handle and distribute telephone calls.
- information desk, to be located in the main lobby G-1.
- maintenance staff and office facilities.
- central workshop for maintenance and repairs of equipment in the center.

The most significant facility here is the workshop. It should contain a wide range of equipment and supplies. Not only will routine repair and maintenance work be done here, but new furnishings, tables, stands, racks, etc. for use throughout the center will probably be built here. Work on sets and properties for the origination units (P-3 and P-4) may also be done here. The workshop should relate closely to the main service entrance to the building (G-7) and should be located on a main corridor, or near a freight elevator to have access to the rest of the building.

A FUNCTION

The central receiving area will act as a point in the building where all materials, packages, mail and other deliveries will be brought for sorting and distribution. The only exceptions to this will be the regular instructional materials delivery and pic-up (which should go directly to a small loading area in component R-5) and kitchen service.

B STAFF

Staffing would most likely consist of a Receiving Director whose job it is to supervise all operations. Staff and clerks would be employed as the need arises.

C FACILITIES

Loading Dock

- protected from the elements (by overhang, curtain, etc.).
- platform at adequate height for truck back-up.
- steps or ramp to ground level.
- slope away from building for drainage.
- possible lockable metal gate so materials can be stored safely on the dock.

Receiving Room

- a large room for receiving, sorting, bagging, etc.
- smooth floor surface for carts, etc.
- relate directly to loading dock.
- relate directly to main corridor or freight elevator.

Mail Sorting Area

- a smaller area for sorting, budling mail and packages, both outgoing and incoming.
- provision for scales and postage meter operation.
- relate to receiving area and corridor.

Director's Office

- a small office for the Receiving Director.
- possible glass vision panel to the receiving room.
- relate directly to receiving room.

D GENERAL

This component should be located for good truck acces, with proper exterior areas for backing, turning, etc. Internally its location need not be particularly central, but it should be close to a main circulation path (or elevator) so materials can reach all points in the building.

board should then sit down and figure ways and means of housing them. Certain broad guidelines might help them in their thinking:

- certain office and conference functions need few adaptations and are the most likely candidates for installation in existing buildings.
- components requiring facilities with a host of special features (such as origination facilities, computer areas, demonstration facilities) might require more money and effort in renovating existing buildings than in building new ones (or additions).
- strong ties between components, as expressed in Part D of their discussion, should be maintained wherever possible.
- excessive decentralization of functions that tend to lean on each other, even only for casual support, may cause more trouble and inefficiency than it is worth.

There are many different approaches the regional board can take toward centralizing or decentralizing components and services. To identify these approaches, we might note three different facility "types" or forms that the regional center can take:

TYPE A

a large central building or group of buildings on the same site. all of the facilities for regional services would be located here, with the possibility of some adjunct field units (Type C). New buildings or additions will probably be required.

Physical Siting

As far as developing the site or sites that are finally chosen, certain points should be kept in mind:

- Thought must be given to access of cars and trucks onto the site, and from there to the building. these paths should be well-defined and easily understandable.
- Roads to the site and on the site should be heavy-duty enough to take constant beating from cars and delivery or service trucks.
- Thought must be given to places where the center might logically expand.
- Prevailing wind and other climatic factors should be analyzed.
- Siting should afford a good view of the building; natural vegetation should be kept intact where possible.

Access

Much has already been said about access, and much more still remains to be said. In general, the planner of the service center must recognize that it is very important that the different persons trying to get into the building not only find their way in, but can also find their way through it. Seeing that there are many different classes of users, and that each class has its unique requirements, and that these requirementswwill undoubtedly cause conflicts, the planner must establish a series of access priorities. These note which classes are most important, and what

TYPE B

a series of buildings around the region, possibly two or three "centers". while most services would only be provided in one of these units, some might be duplicated in order to bring them closer to the grass-roots. This may or may not entail new construction. Examples include:

- regional administration center, including research and publication (G-2, G-8, P-7, A-1, A-2, A-3, A-4).
- demonstration and training center (C-6, G-3 G-4).
- central collections center (R-5).
- production and origination center (P-2, P-3, P-4, P-5, P-6).
- information services center (R-2, R-3, R-4).
- professional resource center (R-2, R-3, C-3, C-4).
- curriculum center (C-2, C-3, C-4).
- many other combinations.

TYPE C

a series of totally decentralized units in existing schools or other buildings. while this is not recommended as an overall regional pattern, these "grass-roots" centers can be used to supplement Types A and B above:

- local production units (P-6, P-5, P-8).
- pupil personnel services unit (C-5).
- data processing center (A-5).
- regional administration & research (G-2, G-8).
- other individual units.

The four regional "schemes" presented on the next page give some clue as to how various combinations of these broad "types" might be included in a regional plan.

Locating the Center

Another important consideration is the location or locations of service center facilities. In making these decisions, the regional board should give a good deal of thought to these and other factors:

- If the center is designed to be extensively used by teachers and other grass-roots staff, it should be located so that the greatest number of these people have the shortest or fastest drive to it. This may mean making a regional map and plotting teacher/staff "densities" on it. Such a map is presented as part of the schematic study background in Chapter 10.
- Next an ease-of-access or convenience factor must be applied. Persons separated from the center by five miles of arterial highway may have an easier time getting there than those traversing one-half mile of city streets!
- Overall travel time and distance do become factors. Placing a center close to a corner of a region so that some teachers in a far corner have a 50-mile drive will keep these teachers from ever using it. In sparsely populated areas where centers and regions must cover many square miles, a more decentralized pattern may be the answer.
- Given a choice, in-city sites may be disadvantageous from the standpoint of continuous vehicular access.
- Finally, the site should be "easy to find." While this is a highly subjective point, it should not require a dozen sheets of carefully-prepared notes to direct newcomers to it.

It is not hard to see that the choice of site is akin to a three-ring juggling act. The siting of the schematic study center in chapter 10 illustrates some of these points.

B STAFF

If the office follows the principles of only co-ordination, administration and dissemination, only a generalist staff need be provided. This staff could be professionals trained in the skills of organizing and drafting proposals, and in seeing that effective co-operation continue between research projects throughout the region. A regional research director should head up this staff.

C FACILITIES

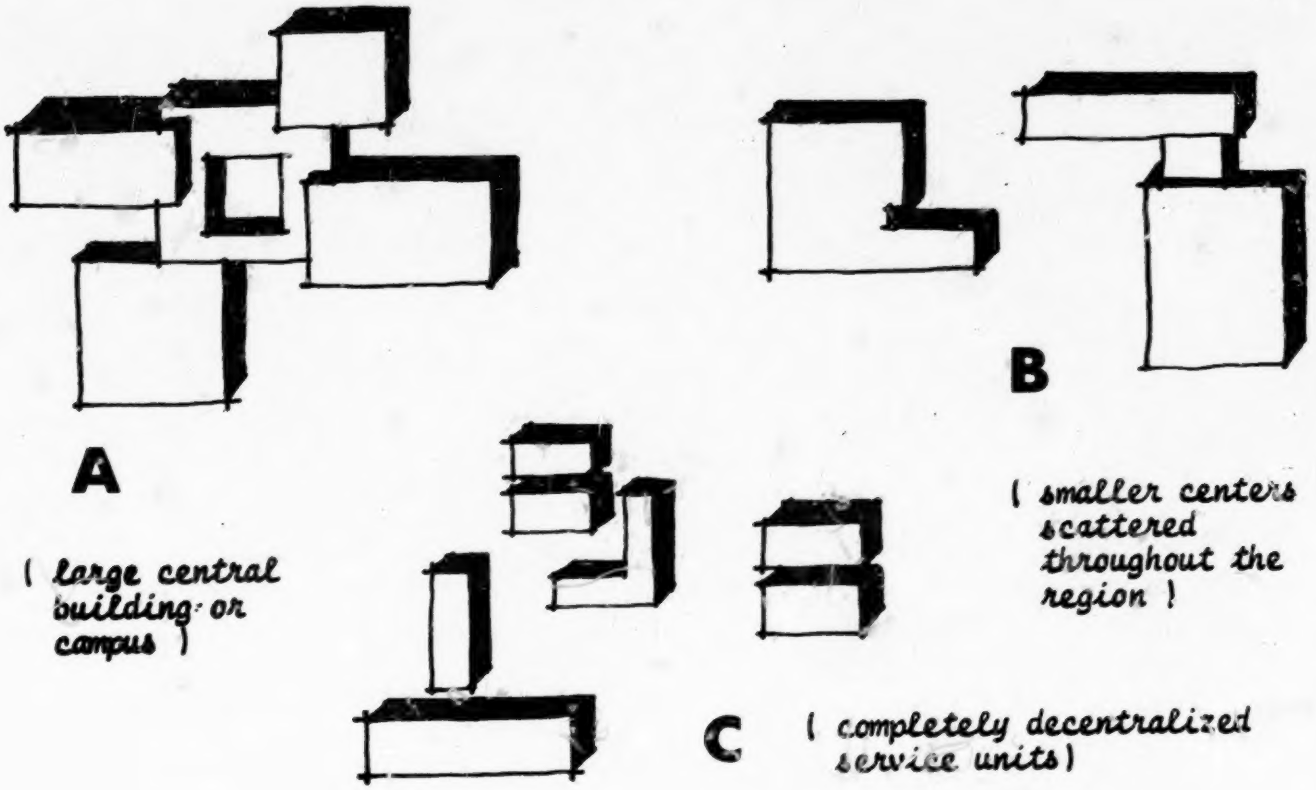
Actual facilities needed for this operation are much less important than the people using them; for a staff of administrators and co-ordinators,all that is suggested is:

Research Staff Room

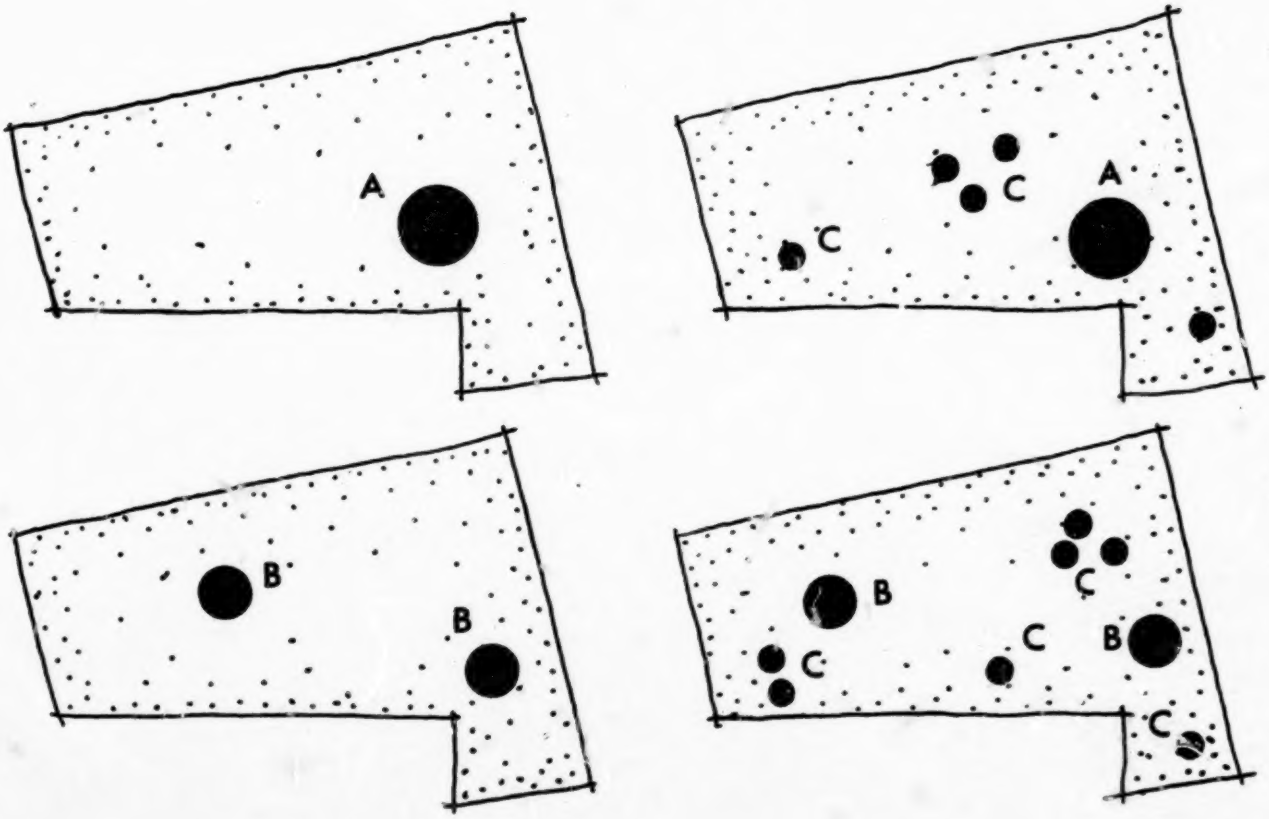
- a large open space serving as office, library and informal conference area to the research staff.
- generous display areas (write-on and tackboard); possibly one wall devoted to a scheduling chart or graph.
- adjustable shelving.
- access to a more formal conference room nearby.
- adjacent storage area.
- director may have a separate adjacent office.

D GENERAL

This component will be administratively tied to the Regional Administration office (G-2) and should be closely related to that component.


A
(large central building or campus)
B
(smaller centers scattered throughout the region)
C
(completely decentralized service units)

FACILITY TYPES


A
A
C
C
B
B
B
C
C
B
C
C

REGIONAL PLANS

their needs are. The list might look like this:

1 VISITORS: these are probably most important since they visit the center only once (or a few times at most) and they must have immediate orientation. It should be clear to them where to park, where to enter, and what to do when they get inside.

2 INTERIM CENTER STAFF: while these persons will be at the center longer than the occasional visitor, they will not become so thoroughly familiar with it that they can "find their way blindfolded" through it.

3 TEACHERS AND FIELD PERSONNEL: while it is important that their first experience in the center not be over-confusing, they will become familiar enough with the building to find the specific components in which they are interested.

4 CENTER STAFF: these employees will gain familiarity in a hurry. They will not look for the front entrance, but the most convenient door".

Finally, when persons get into the building, there are various components which should be located near the main lobby; there are many that should be "easy to get at"; and there are others which can be tucked away in the corners of the building, out of the public reach. Page 189 at the end of this chapter presents a diagrammatic approach to access priorities.

Service

The same access considerations noted above should be applied to servicing the building. The first

chapter 9

Putting the Components Together

While Chapter 8 detailed the various components that might go into a service center, it only hinted at the relations between them, and the process that must be followed to synthesize them into a facility or group of facilities. This process must be given a great deal of thought, for the success of educator and architect in following it through will measure the success of the resulting buildings.

Central and Non-central; Old and New

A point to be made at the outset zeros in on this word "center." Despite the images that the word conjures up, it is not necessary that all services be provided from one building or one campus. In Chapter 3 we spoke of regional networks; let us extend this thinking to say that many of the components can as easily be installed in decentralized existing facilities; of course, many cannot.

Although there are many advantages in bringing all components together in one building, it is far from necessary. After deciding on the types of services it wishes to provide, the regional

A FUNCTION

In this era of projects, tests, demonstrations and evaluations, there is a pressing need for regional co-ordination of research projects in the area, and dissemination of research projects carried on elsewhere. This office could handle the functions that would kepp the center in the midst of the innovative process (see page 39):

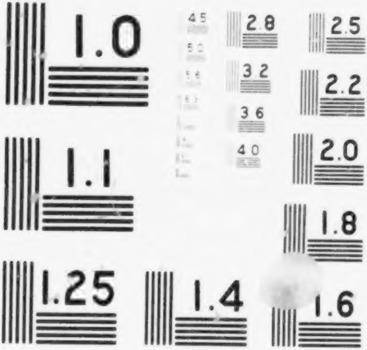
- providing staff to help individuals in the region draft research proposals to funding agencies.
- providing inspiration and advice to individuals wishing to undertake research projects.
- undertaking of its own sponsored projects.
- co-ordinating the various projects in the region, to insure proper communication between projects investigating in the same general area.
- organizing, interpreting and reporting of current research from outside sources.
- conducting in-service discussions of methods and results.
- conducting follow-up, evaluation, and reporting of specific projects.

Just how these tasks can be accomplished is up to individual preference. It seems most logical, however, that this office be staffed with generalists who co-ordinate and administrate research rather than handle it themselves. Rather than end up with the various projects "dumped in their laps" at mid-stage, they can see that the entire project, from inception to evaluation, be handled effectively.

PART III

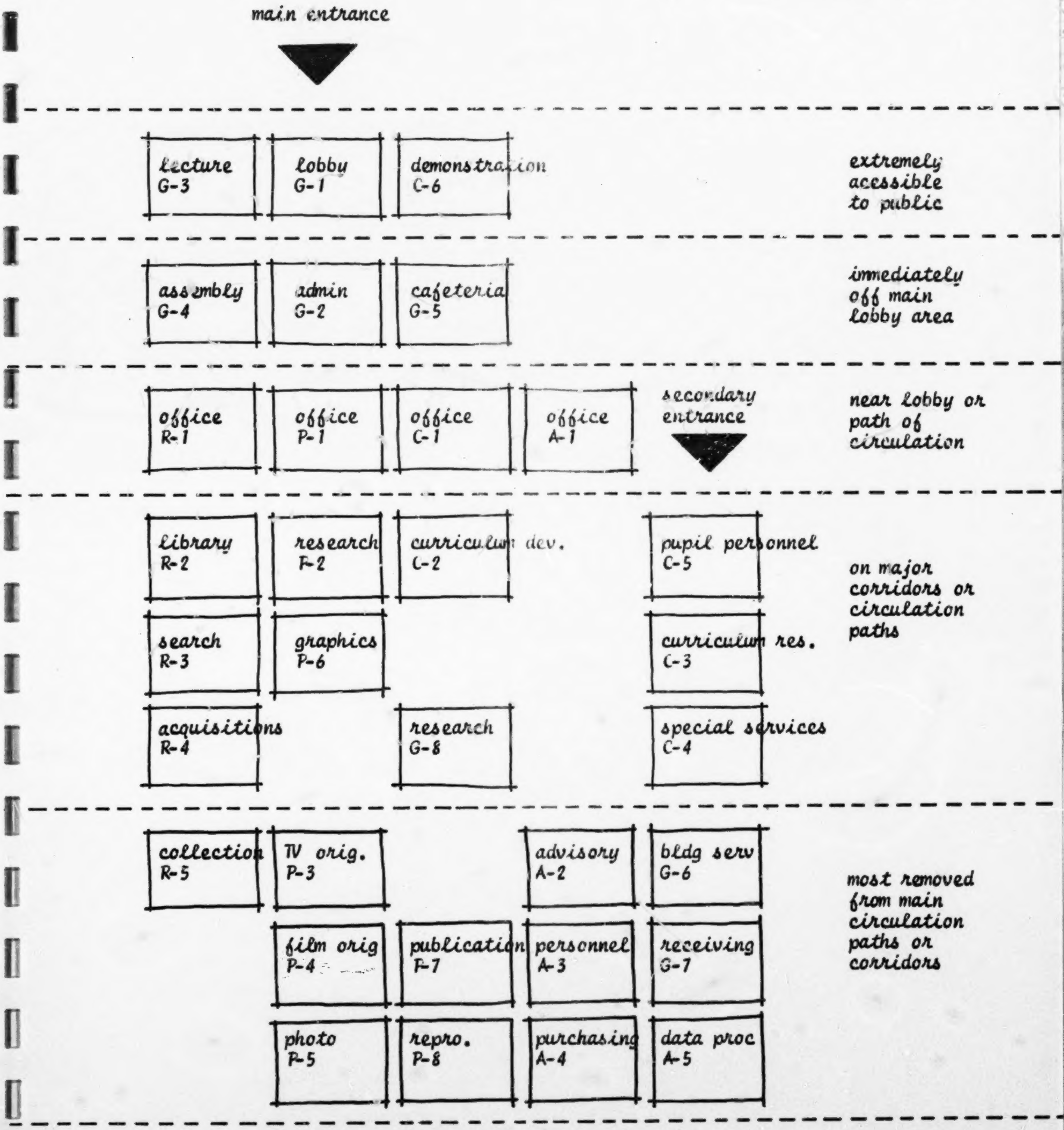
9

THE SYNTHESIS OF THE COMPONENTS

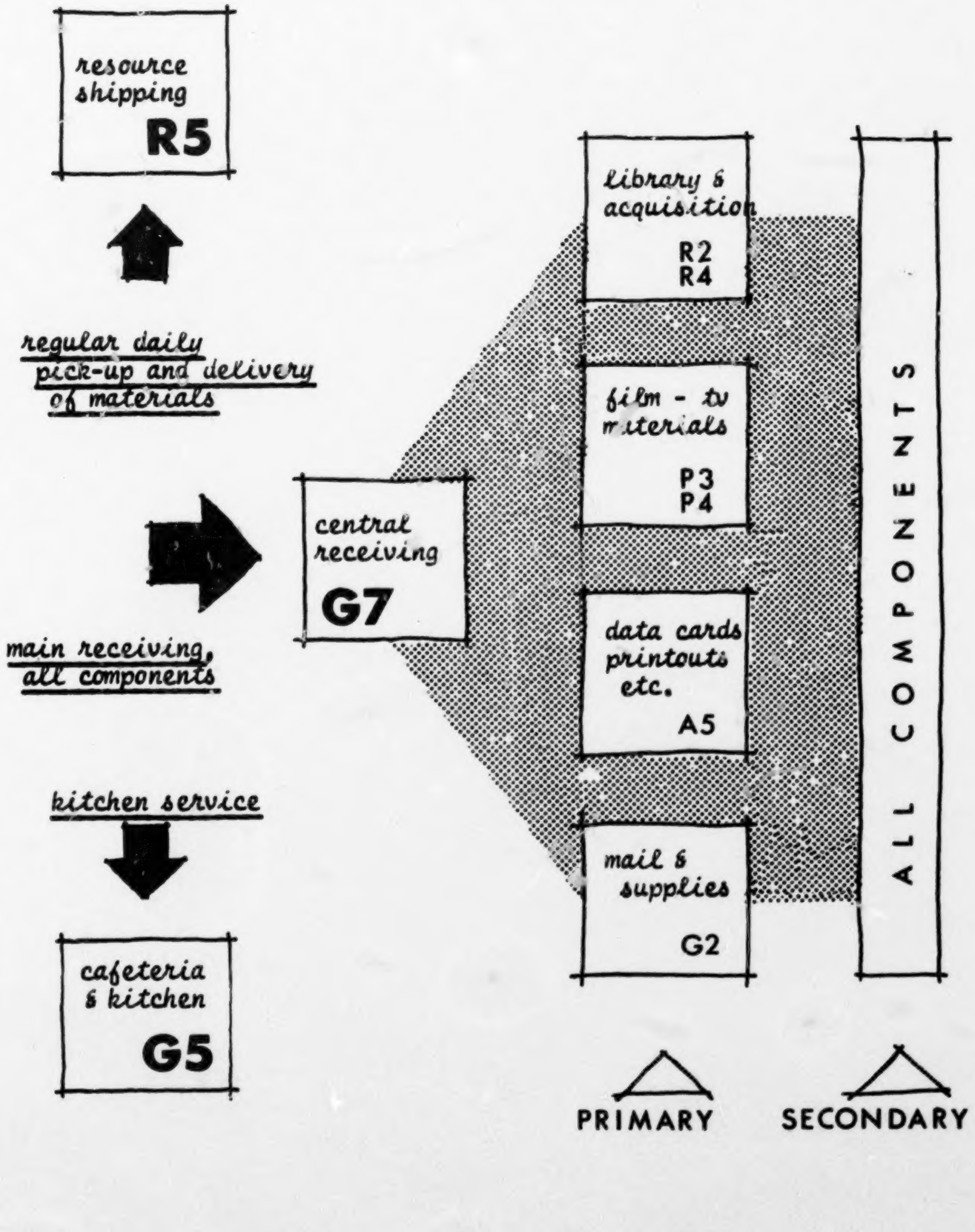

1.0
4.5
5.0
5.6
6.3
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.1
1.8
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963

ACCESS


main entrance
lecture G-3
lobby G-1
demonstration C-6
extremely acessible to public
assembly G-4
admin G-2
cafeteria G-5
immediately off main lobby area
office R-1
office P-1
office C-1
office A-1
secondary entrance
near lobby or path of circulation
library R-2
research P-2
curriculum dev. C-2
pupil personnel C-5
on major corridors or circulation paths
search R-3
graphics P-6
curriculum res. C-3
acquisitions R-4
research G-8
special services C-4
collection R-5
TV orig. P-3
advisory A-2
bldg serv G-6
most removed from main circulation paths or corridors
film orig P-4
publication P-7
personnel A-3
receiving G-7
photo P-5
repro. P-8
purchasing A-4
data proc A-5

SERVICE


resource shipping
R5
regular daily pick-up and delivery of materials
main receiving, all components
kitchen service
cafeteria & kitchen
G5
central receiving
G7
library & acquisition
R2
R4
film - tv materials
P3
P4
data cards printouts etc.
A5
mail & supplies
G2
ALL COMPONENTS
PRIMARY
SECONDARY

Construction Methods

The construction methods used are also left to the individual case. The need for flexibility from year-to-year (not day-to-day or hour-by-hour) in many of the components suggests that the region look into modular construction techniques at least be considered. Not only should many walls be demountable, but services and utilities (power, water, etc.) should probably be put on a "grid" system that will allow easy access and "tapping in" in future years.

Another point is that of "sprawling" the components out on the ground versus "stacking" them in the air. In the city, this choice is already dictated, but probably at the expense of frieight elevators and a good deal of vertical circulation space. Given the choice, it is suggested that those functions requiring continuous access between them (such as the origination components) be placed on common levels. Many other components can be given "second-story" positions. A two-level approach is presented in the Schematic Study to point up some of these upstairs-downstairs relationships.

Phasing and Change

A final word on overall design has to do with phasing and plans for expansion. These considerations must be made at the beginning, or costs of adding on to the structure will be out-of-line.

For example, a few small considerations in designing mechanical systems can make addition or change easy: running wiring, piping, and air conditioning ducts out to the ends of corridors which may someday be extended id a smart move. Oversizing wiring and mechanical equipment (where this does not damage its efficiency) may be a smart move. Providing a modular wiring and piping plan with easy access for changes may be a smart move.

IV

THE SCHEMATIC STUDY

PART IV 10 THE PARAMETERS

chapter 10

The Schematic Study

It was mentioned in Chapter 8 that a mere presentation of components is not enough; some guidelines to synthesizing them were given in Chapter 9; this chapter and one following hope to present a schematic study demonstrating these points.

The schematic study sets up a hypothetical region, presents certain facts about it (to be used as parameters or "givens"), proposes a program of operations and a program of space requirements, and finally diagrams how the selected components might be put together.

Choosing a Region

In order to provide a realistic basis for this study, an area in New York State which we shall call the "Center County Region" has been selected, researched, and used as a basis for programming the center. It is indeed a real area in New York, but the names and exact boundaries have been changed so the issue does not become clouded with unintended shadings or or overtones. The remainder of the chapter attempts to present (1) the physical facts about the region, and (2) the necessary assumptions made by the author.*

The Region Outlined

As can be seen from the map on the next page, the Center County region covers an area about twenty-two miles square. For discussion purposes it is situated along a principal river in upstate New York. In line with some of the criteria listed in Chapter 4 we might say that:

- this area appears to be a cohesive region, using a large city of 85,000 (in district 4 on the map) as a focus.
- marketing and economic allegiances appear to be with this large city.
- some large industries in the city employ a good many workers in the region.
- while the river is often used as a boundary between the districts, its historical background as an "avenue of development" and its many crossings do not make it a sociological barrier.
- the region covers all of Center County and cuts into four neighboring counties. its boundaries follow those of the nine school districts that make it up.

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* It should be noted that these assumptions are at best reasonable guesses on the author's part -- the individual regional board cannot afford to make these assumptions; the proper attitudes and statistical surveys must be made. See Chapters 2-6.

- the region has a widely varying character, from urban to suburban to rural. This is examined in more detail below.
- the population is the heaviest in the southeast corner (in districts 3, 4, 5, 6 and 7) and growth trends point to large increases in districts 6 and 9).

The Public Schools

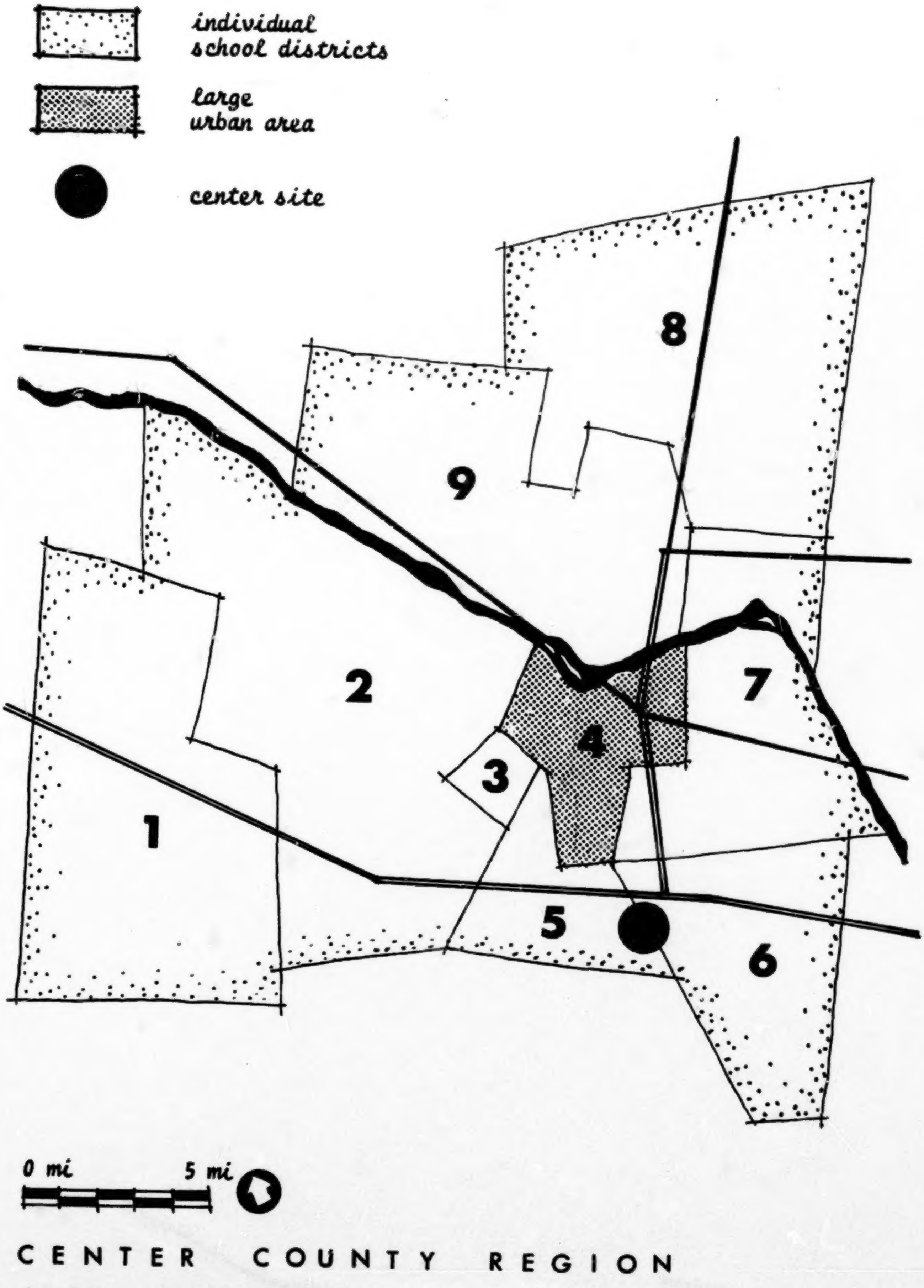
There are nine public school districts in the region; they range in size from the small rural district to a large city school system. The map on the preceding page outlines their boundaries and the table at the top of the next page gives present and projected enrollment figures.

DISTRICT 1 is an isolated rural district, characterized by sparse population and only one central school. Prospects for growth are not astounding.

DISTRICT 2 varies from sparse rural settlement in its western portion to rather heavy suburban densities closer to the city. Most of its schools and most of its teachers live in the eastern portion, and this section is likely to grow much faster than the western area.

DISTRICT 3 is a small but heavily populated suburban area on the city's south side.

DISTRICT 4 is the city school district, and comprises a large percentage (nearly 30%) of the teachers and students in the region. The city has expanded quite fully to its limits, and further expansion is hampered by poor topogrpahy within the city; prospects for further growth are slim compared to the other districts.


individual school districts
large urban area
center site
8
9
2
7
4
3
1
5
6
0 mi
5 mi

CENTER COUNTY REGION

(public school districts)

task is to sort out the different types of servicing the building will get: which are daily and regular, which are infrequent? which will be made by center-employed staff who will know exactly where to go? which should be given priority? Three broad classifications might arise from this analysis:

1 CENTER-OPERATED, such as regular pick-up and delivery of instructional materials. This staff will know exactly where to go to deliver supplies, and the loading dock for this activity can be "tucked away."

2 IRREGULAR DELIVERY, of materials, supplies, equipment, etc. It is most important that truckdrivers "find" the central loading dock. Certain "regular" deliveries, such as mail, fall into this category.

3 KITCHEN: kitchen service should probably be kept separate from the others, using its own small loading area. Since suppliers tend to be regular, there should be little trouble in their "getting lost."

The diagram on page 190 notes these points.

Basic Plant Organizations

There are many different ways of organizing the building. Some general schemes for organizing the Schematic Study center are presented in Chapter 11. This however, becomes an individual choice for architect and client.

SUMMARY OF PUBLIC SCHOOL DISTRICTS IN THE CENTER COUNTY AREA

district		students 1964	students 1980*	teachers 1964	teachers 1980*	% inc
1	rural	810	1110	37	51	37%
2	rural-suburban	2520	3460	147	201	37%
3	suburban	1530	2070	76	104	37%
4	urban	12000	14600	750	880	17%
5	suburban	3470	4750	197	270	37%
6	suburban	7420	13300	399	718	80%
7	suburban	4320	5360	253	326	24%
8	rural	4740	7050	241	359	49%
9	rural	4170	6670	224	359	60%
	TOTALS	42980	58370	2324	3268	

DISTRICT 5 is a heavily-populated suburban area, although there are still large amounts of open land left for expansion.

DISTRICT 6 is a fast-growing suburban district. It is experiencing infilling and population influx from the city in Center county and another large city to the southeast.

DISTRICT 7 is a suburban area that has already experienced most of its infilling. The area is one of high per capita income and many fine old homes.

DISTRICT 8 is a forested rural area that should receive moderate expansion. The district is large and many students are bussed quite a distance to school.

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* These growth projections are based on figures taken from an actual planning study of the region. They assume, however, the same percentage of the population will be in school in 1980 -- perhaps an unwarranted assumption.

Other Available Participants

There are many other possible participants in a regional effort in the Center County area; they include:

- City Public Library
- College Library
- Industrial Organizations
- Hospitals (2)
- County Historical Society
- County Museum
- Educational TV Station

There is no reason why local drama and theatre groups, professional societies and other municipal associations and institutions cannot be considered as the legal machinery permits.

Services Included

In order to make the schematic study meaningful, these assumptions are made about the services to be provided in the Center County area:

- All of the services listed in the "program of operations" in Chapter 7 will be included.
- These services will be rendered to public and private schools at this time, with inclusion of other participants in time.
- That all member organizations desire the listed services.
- That there are no present "satillite" centers in the region, and that no centers outside of the region are providing services to schools in the region.

This is a strict and arbitary set of restrictions;

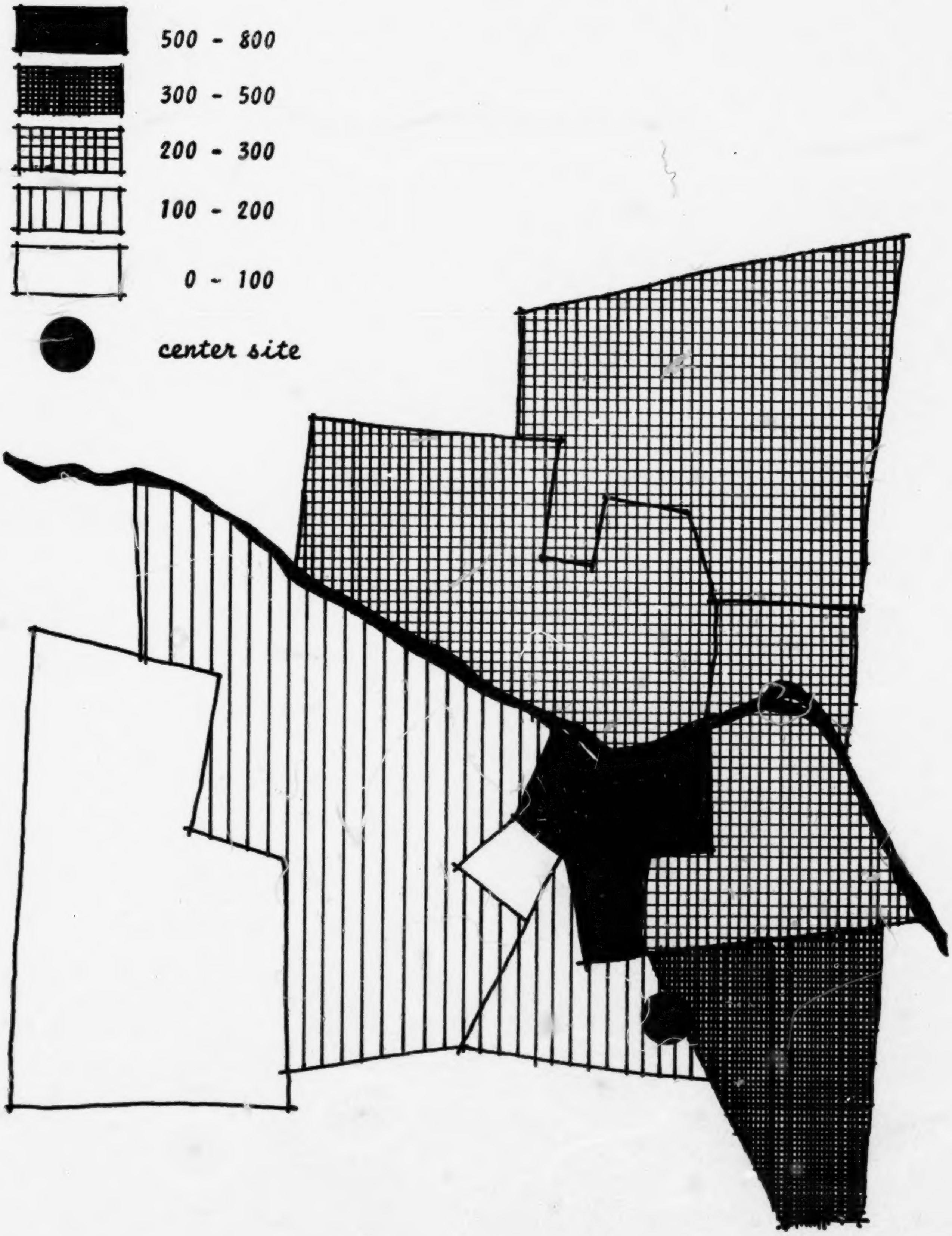
no individual regional board can afford to be this bold!

Siting

With the decision to go all the way and provide all of the services listed in Chapter 7, the Center county regional board decided to build one building to house them, with the possibility of creating more local "satillites" in the future. Placing the figures listed on page 195 on a "density map" (next page) led the regional board to locate the center near the southeast corner of the region, just outside the city limits. In this case, an intersection of two major arterial highways and the ready availability of open land in this area made the choice of site an obvious one. Although it is nearly twenty miles from the center to the outer limits of districts 1 and 8, the artierial roads cut down travel time drastically. In fact, persons in the tightly congested city may have more trouble getting to the center than those in the rural areas.

Other Assumptions

Finally, many other important assumptions have been made about the Center county region and the people in it:


500 - 800
300 - 500
200 - 300
100 - 200
0 - 100
center site

CENTER COUNTY REGION

(number of teachers per district)

- That the attitudes of administrative, teaching and non-teaching staffs in the individual districts are in accord with the regional center idea, and that they have all actively demonstrated support for the center.

- That a regional board has been legally provided for; and that it has the power to authorize the planning and design of the center.

- That the funding and floating of bonds for construction is possible.

- That means of financing operation of the center on a year-to-year basis have been settled on an equitable basis.

- That adeqaute assurance has been given that services will be on a continuing basis, not just from week-to-week or year-to-year.

- That the regional board plans to organize, staff and administrate the center along the lines noted in Chapter 7 and used for setting up the components in Chapter 8.

PART IV 11 THE SCHEMATIC STUDY

chapter 11

The Program

Now that the relationships between the various components of the regional service center have been explored, it becomes necessary to develop a program of physical space requirements for the region under consideration. This program not only attempts to indentify each of the spaces in the center -- from the largest meeting room to the smallest closet -- but it must include all the considerations that were used in writing the "Part C: FACILITIES" requirements for each of the components in Chapter 8:

types of spaces needed
details of function and use
special furniture or layout requirements
special equipment considerations
mechanical considerations: plumbing
    heating
    ventilating
    power service
air consitioning and humidity control
acoustical requirements
special lighting requirements
direct and indirect relations to other areas
access and means of public entry
access and means of service entry
relation to other components
square foot area needed

Since each of these considerations but the last was explored for each of the components presented in Chapter 8, our program of spaces here will contain only square foot area requirements. The reader must be cautioned, though, that an effective and workable program -- one which will give the architect genuine assistance in planning the center -- must contain all of the above considerations.

The square foot areas given in the following program are estimates (an unfortunate but necessary condition since no centers on this scale have been built). They are intended to suit a center for a region presented in Chapter 10.

PROGRAM OF SPACE REQUIREMENTS
REGIONAL EDUCATION SERVICE CENTER
for the CENTER COUNTY AREA

resource services

R-1 Department Office

reception and waiting	150	
secretarial and work	320	
storage area	80	
department co-ordinator	225	
conference room	225	1,000

R-1 Field Services Office

field services staff office ...	400	
storage area	50	
division director	150	600

R-2 Professional Resource Library

central library area	4000	
microfilm reading area	150	
work and staff area*		4,150

R-3 Search and Bibliographic

reception area	150	
division director	150	
storage area	40	
documentation staff	220	
storage area	40	
work and machines area	1500	2,100

R-4 Acquisitions Center

examination area	300	
preview room**		
office and processing area	400	700

R-5 Central Collections

circulation office		400	
file room		100	
preview room		225	
central coolections		3200	
(3-D materials	600		
2-D materials	400		
science materials	300		
science equipment	500		
equipment library	700		
film library	700)		
shipping and receiving		2000	
shipping office		100	
loading dock***			6,025

production services

P-1 Department Office

reception and waiting	150
secretarial and work	320
storage area	80

---

*provided in R-3.

**use preview room in R-5.

***exterior area.

DISTRICT 9 is quite rural in the northern section, with a large village along the river in the south; it should receive a good deal of growth in times to come.

In general, most of these districts are quite forward looking, although all admit the need for regional services. Only the city district has adequate resource personnel and programs -- and they feel they can immeasurably benefit from regional co-operation.

Co-operative Board

Currently a three-county co-operative BOCES board serves most of the area. It provides some adjunct staff and consultant personnel, and operates a data processing center in one of the schools. It is assumed that this BOCES board will somehow merge with the regional board and consolidate what services it does provide in the Center county area with those of the service center.

Other Educational Institutions

It is eastimated that there are now about 8,000 students in parochial schools in the region. There is one engineering college of moderate enrollment in the city, and a County Community College is in the planning stage.

department co-ordinator	225	
assistant co-ordinator	150	
assistant co-ordinator	150	
conference room	225	1,300

P-2 Production Research

central resource and clerical	225	
division director	150	
staff room	300	
storage area	50	
work room	600	
storage area	50	1,550

P-3 Television Origination

reception and clerical	225	
division director	150	
TV operations director	150	
TV staff room	400	
TV faculty offices (3 @ 120)	360	
conference area*		
TV teaching studio	1200	
control room	160	
sound lock	40	
viewing room	100	
TV teaching studio	600	
control room	160	
sound lock	40	
TV teaching studio	600	
control room	160	
sound lock	40	
central control & engineering	600	
recording room	240	
film room	240	
engineer's office	120	
ante room	150	
dressing rooms (4 @ 60)	240	
toilets (2 @ 40)	80	
property and set storage**		
equipment storage & maint.	500	6,555

P-4 Film Origination

motion picture studio***		
audio maintenance area	80	

---

* use conference room in P-1.
** use set storage area in P-4.
*** use TV studio for filming.

sound recording area:		
central projection area	150	
sound recording studio	80	
sound recording studio	80	
control booth	160	
conference and rehearsal	225	
equipment storage area	200	
set and property storage	1000	
staff office	225	2,200

P-5 Photographic and Processing

photo and animation studio*		
work and editing room	600	
photographic dark room	225	
photographic dark room	225	
film vault	225	
preview room	225	1,500

P-6 Graphics Center

division staff room	400	
preview and conference	225	
graphics work room	800	
ready storage area	60	
toilet and washroom	40	
in-service workshop	600	2,125

P-7 Publications Center

reception and clerical	450	
director's office	150	
editor & copywriter office	150	
editor & copywriter office	150	
conference area**		
materials storage area***		
copy preparation area	400	1,300

P-8 Central Reproduction

manager's office	150	
make-up and printing area	1500	
finishing room	1000	
toilet and washroom	50	
storage area	400	
loading dock****		3,100

---

* use TV studio for still-photo work.
** use conference area in P-6 or other.
*** use storage area in P-8.
**** exterior area.

curriculum services

C-1 Department Office

reception and waiting	150	
secretarial and work	320	
storage area	80	
department co-ordinator	225	
assistant co-ordinator	150	
conference room	225	1,150

C-2 Curriculum Development Center

division director	225	
storage area	25	
conference & project areas (3 @ 400)	1200	
preview rooms (2 @ 150)	300	
storage area	150	1,900

C-3 Curriculum Resource Center

reception & secretarial	150
storage area	40
division director	150
conference area *	
mathematics resource room	500
office	120
science resource room	1000
office	180
social studies research	500
office	120
language arts resource area	500
office	120
preview room	225
Commercial subjects resource	500
office	80
music resource area	500
recording studio	500
office	120
fine arts resource area	1000
office	120
storage area	120
physical education resource	1900
equipment storage	300
locker and shower area	150
office	120
industrial arts office	120

---

* use conference areas in other sections of the component.

administrative services

A-1 Department Office

reception and waiting	150	
secretarial and work	320	
storage area	80	
department co-ordinator	225	
conference room	225	1,000

A-2 Advisory Services

reception and clerical	225	
division director	150	
co-ordinators offices (5 @ 120)	600	
audit and control	450	
conference area*		1,425

A-3 Personnel Office

reception and waiting	200	
secretarial and work	150	
division director	150	
assistant director	150	
interview rooms (3 @ 80)	240	
toilet and powder room	50	940

A-4 Purchasing Office

reception and secretarial	100	
work room	150	
division director	150	
assistant director	150	
conference room*		550

A-5 Data Processing Center

division director	150	
scheduling/control/staging	600	
punched card machine area	400	
computer room	1000	
storage and equipment	400	
loading dock**		2,550

---

* use conference room in A-1.
** exterior area.

general

G-1 Lobby and Gallery*

G-2 Regional Administration

reception and waiting	200	
secretarial area	300	
work area	100	
records vault	100	
regional services director	225	
assistant services director	150	
assistant services director	150	
storage area	25	
toilet and washroom	50	
regional superintendent	250	
regional board clerk	200	
regional board president	80	
regional board treasurer	120	
conference and board room	300	2,000

G-3 Lecture Hall (240 persons)

lecture hall area	2500	
front projection booth	60	
rear projection area	430	
preparation area	300	
technician area	200	3,460

G-4 Conference and Assembly

assembly and forum area	1200	
equipment storage	120	
kitchenette	80	
chair storage	100	
conference room (15 people)	450	
conference room (25 people)	700	
rear projection area	200	2,850

G-5 Cafeteria and Kitchen

large dining room (60 people)	800
small dining room (20 people)	240
small dining room (20 people)	240
serving area	120
dish return area	60
preparation area	300
managers office	60
dry storage area	120
cold storage area	60
can wash and garbage room	60
loading dock**	

---

* square footage counted as part of correction

** exterior area

G-6 Building Services*

central maintenance office	150	
building supervisors office ...	150	
switchboard room	100	
workshop	1000	1,400

G-7 Central Receiving

central shipping & receiving ..	1500	
mail sorting room	200	
receiving director	150	
loading dock**		1,850

G-8 Regional Research

staff room	500	
directors office	150	650

SUMMARY OF SPACE REQUIREMENTS:

RESOURCE SERVICES DEPARTMENT	14,575
PRODUCTION SERVICES DEPARTMENT	19,630
CURRICULUM SERVICES DEPARTMENT	23,560
ADMINISTRATIVE SERVICES DEPARTMENT .	6,465
GENERAL (SUPPORTING) AREA	12,210
TOTAL USEFUL AREA	76,440
CORRECTION FACTOR for corridors, mechanical areas, loading areas, toilets, utility and other miscellaneous spaces (33%)	22,930
TOTAL BUILDING AREA	99,370

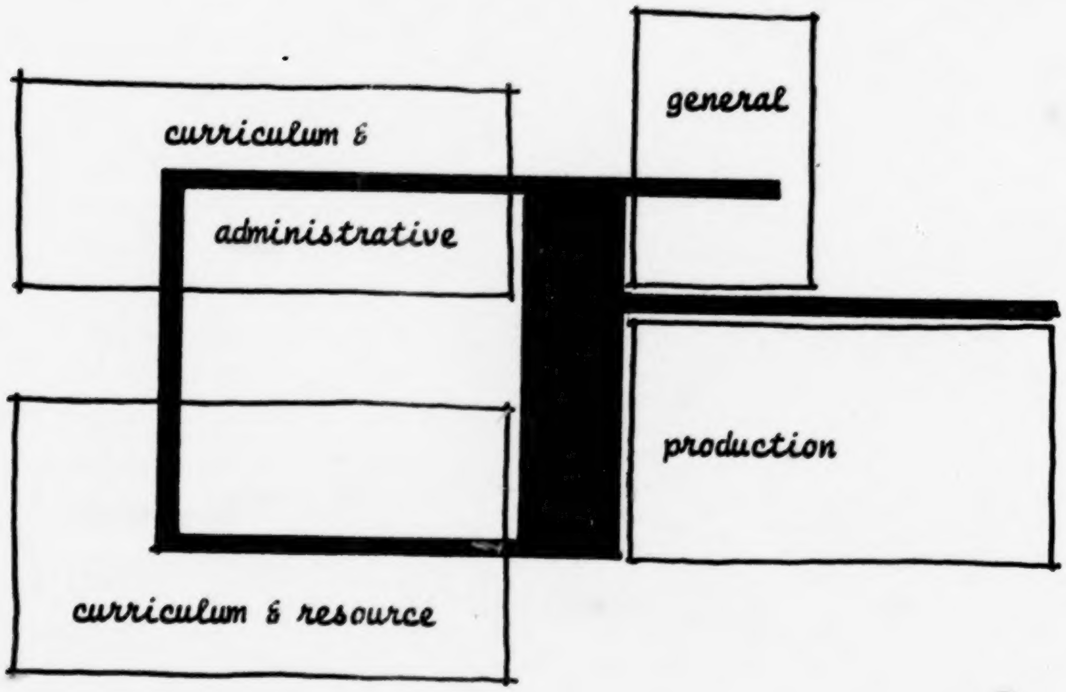
Presenting the Schematic Study

The schematic study hopes to take the programs of space requirements just presented and show what the first steps to converting it to an architectural solution would entail.

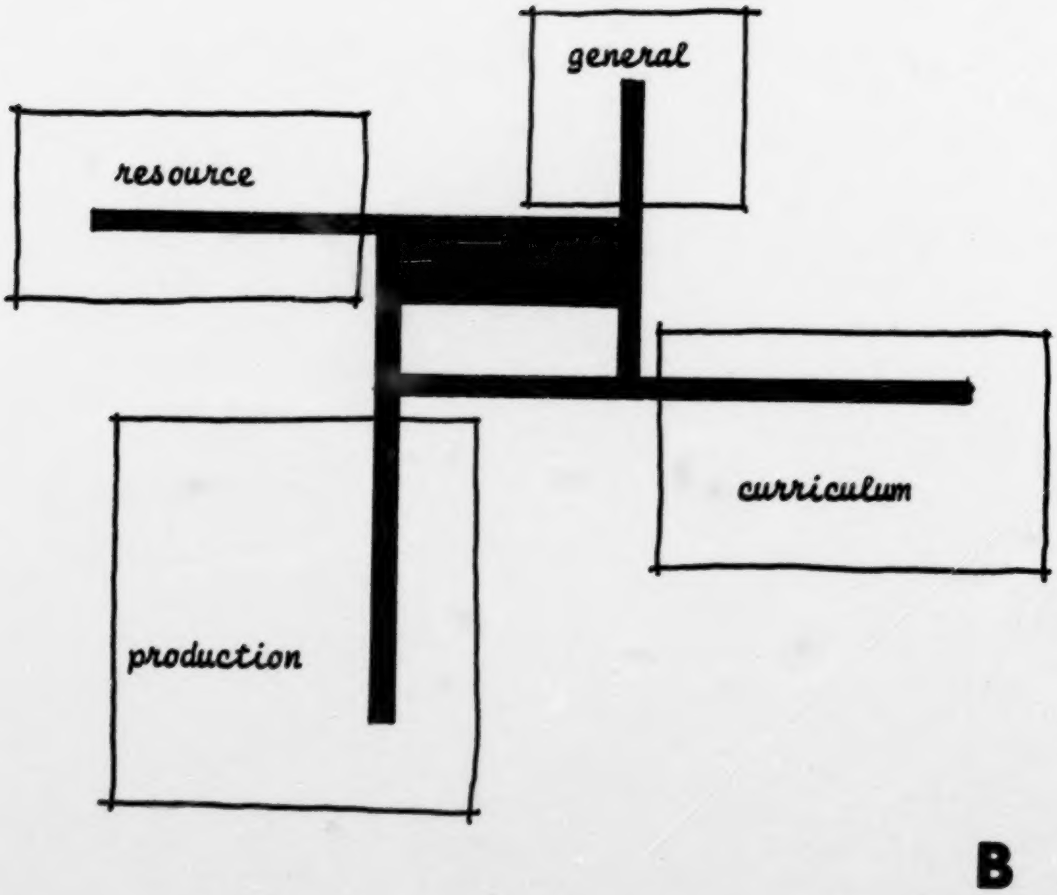
The study does not go so far as to produce an architectural entity called a building; its purpose is to show overall relationships between the components presented in chapter 8, not to dictate solutions or "stock plans." It shows what might result from those all-important first steps in the planning process which yield the synthesis of the components.

Nor is this particular study the only way to put the components together; it does, however, try to adhere closely to the relations hinted at in Chapter 8.

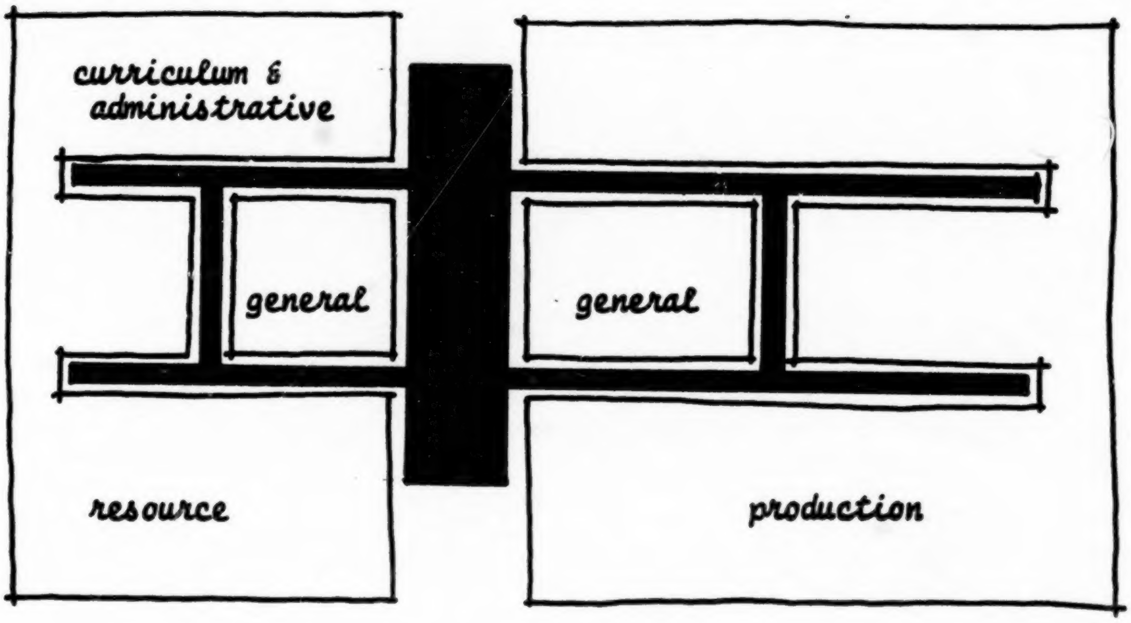
To prove the point that there are many different ways to approach this final synthesis, four different "basic plant organizations" are presented on the next page. Scheme A is then expanded in the following pages.


general
curriculum &
administrative
production
curriculum & resource

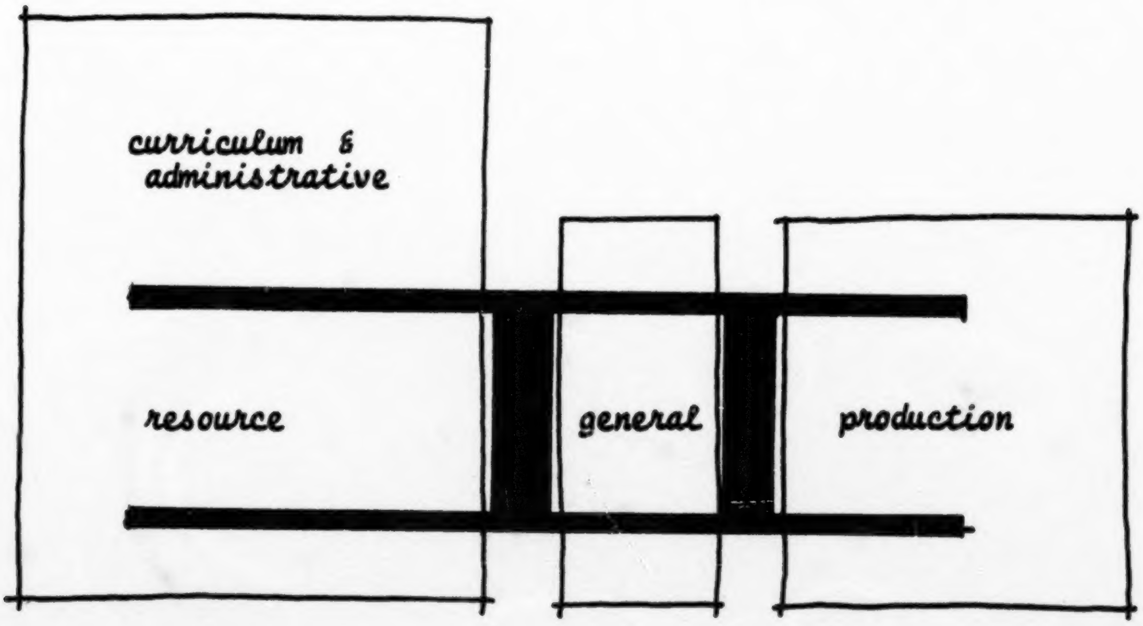
A


general
resource
curriculum
production

B

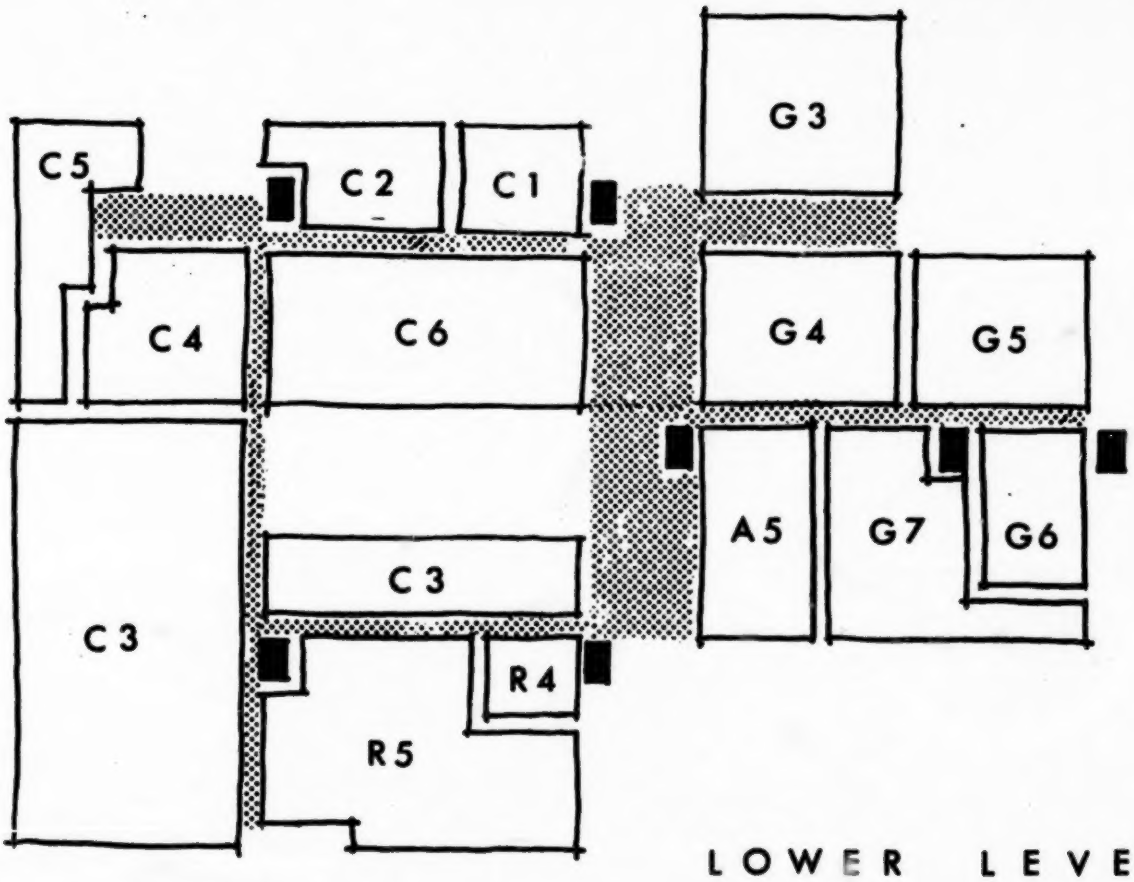

curriculum &
administrative
general
general
resource
production

C

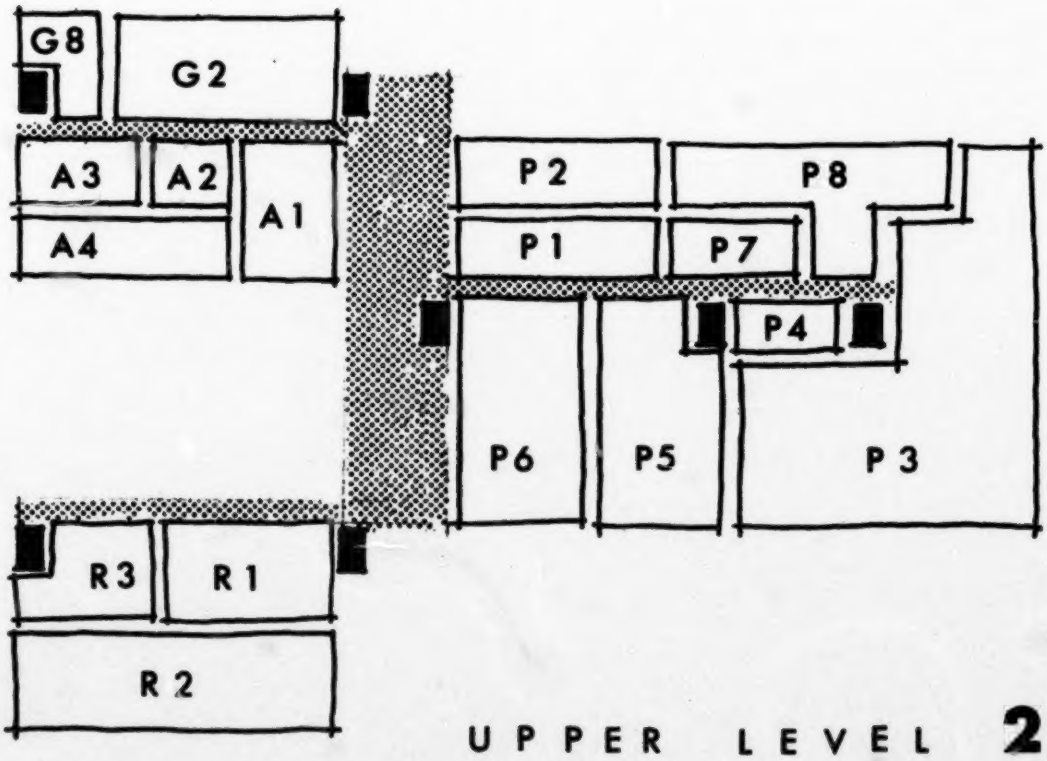

curriculum &
administrative
resource
general
production

D

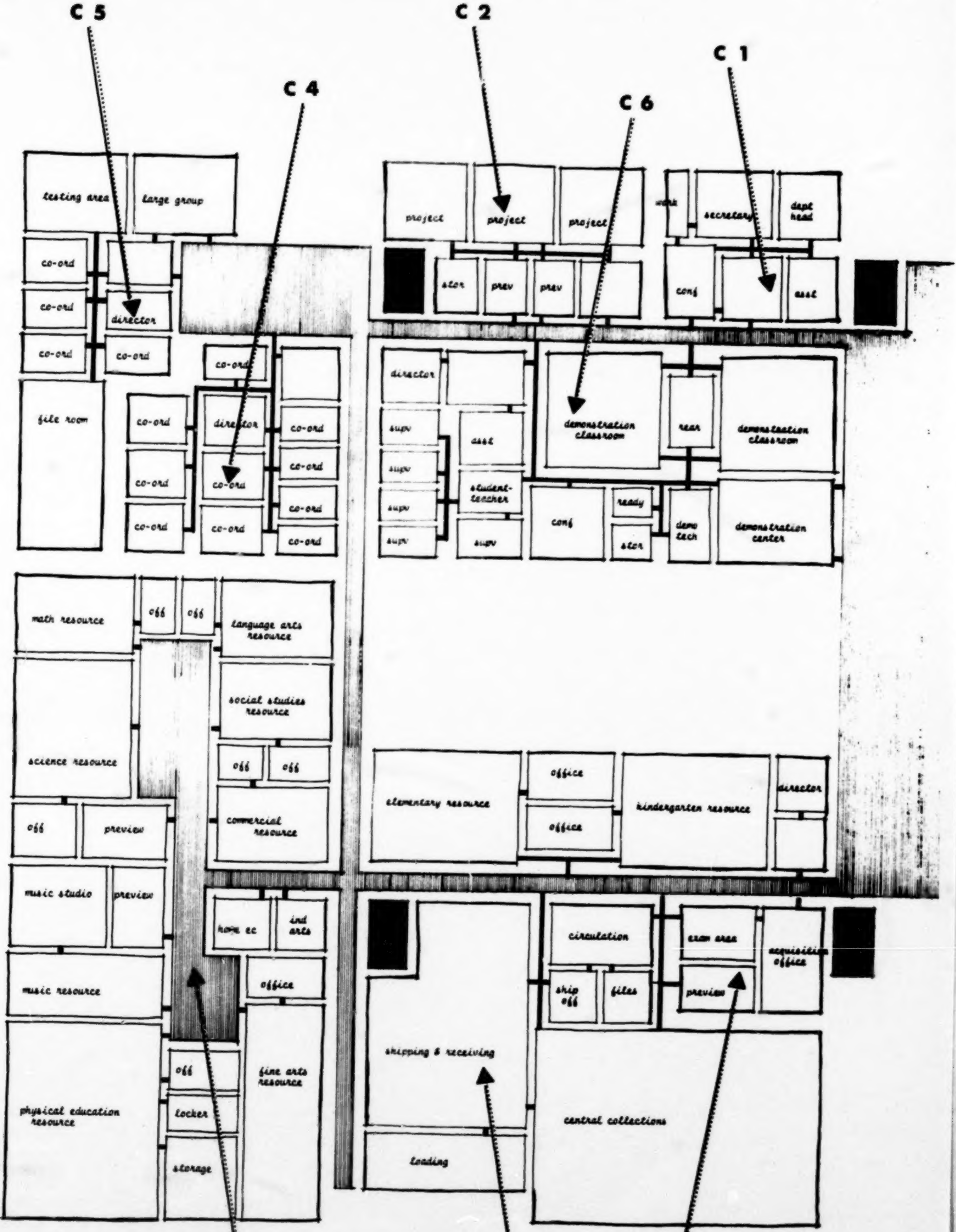
SCHEMATIC


G3
C5
C2
C1
C4
C6
G4
G5
A5
G7
G6
C3
C3
R4
R5

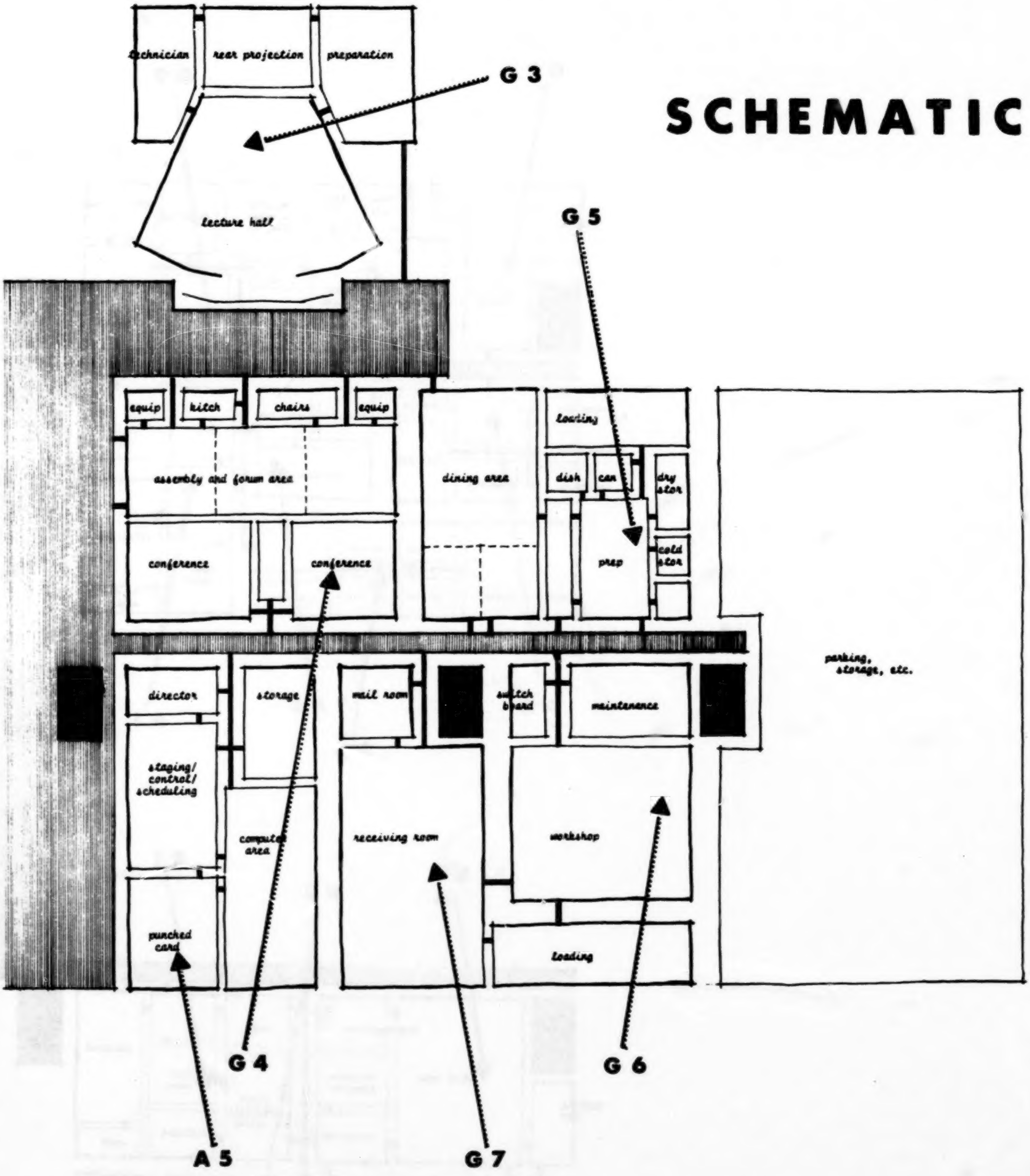
LOWER LEVEL **1**


G8
G2
A3
A2
A1
A4
P2
P8
P1
P7
P4
P6
P5
P3
R3
R1
R2

UPPER LEVEL **2**


C 5
C 2
C 1
C 4
C 6
testing area
large group
project
project
project
work
secretary
dept head
co-ord
co-ord
director
co-ord
co-ord
stor
prev
prev
conf
asst
co-ord
director
demonstration classroom
rear
demonstration classroom
file room
co-ord
director
co-ord
supv
asst
co-ord
co-ord
co-ord
supv
student-teacher
co-ord
co-ord
co-ord
supv
conf
ready
demo tech
demonstration center
co-ord
supv
supv
stor
math resource
off
off
language arts resource
social studies resource
science resource
off
off
elementary resource
office
office
kindergarten resource
director
off
preview
commercial resource
music studio
preview
home ec
ind arts
circulation
exam area
acquisition office
music resource
office
ship off
files
preview
shipping & receiving
off
fine arts resource
physical education resource
locker
central collections
loading
storage
C 3
R 5
R 4

SCHEMATIC


technician
rear projection
preparation
G 3
lecture hall
G 5
equip
kitch
chairs
equip
loading
assembly and forum area
dining area
dish
can
dry stor
conference
conference
prep
cold stor
parking, storage, etc.
director
storage
mail room
switch board
maintenance
staging/ control/ scheduling
computer area
receiving room
workshop
punched card
loading
G 4
G 6
A 5
G 7

1

LOWER LEVEL

home economics office	120	
elementary education area	1000	
office	240	
kindergarten resource area	1000	
office	240	
preview room	225	11,960

C-4 Special Services

reception and clerical	200	
division director	150	
assistant director	150	
conference area*		
co-ordinators offices (4 @ 150)	600	
special programs (6 @ 120)	720	1,820

C-5 Pupil Personnel Services

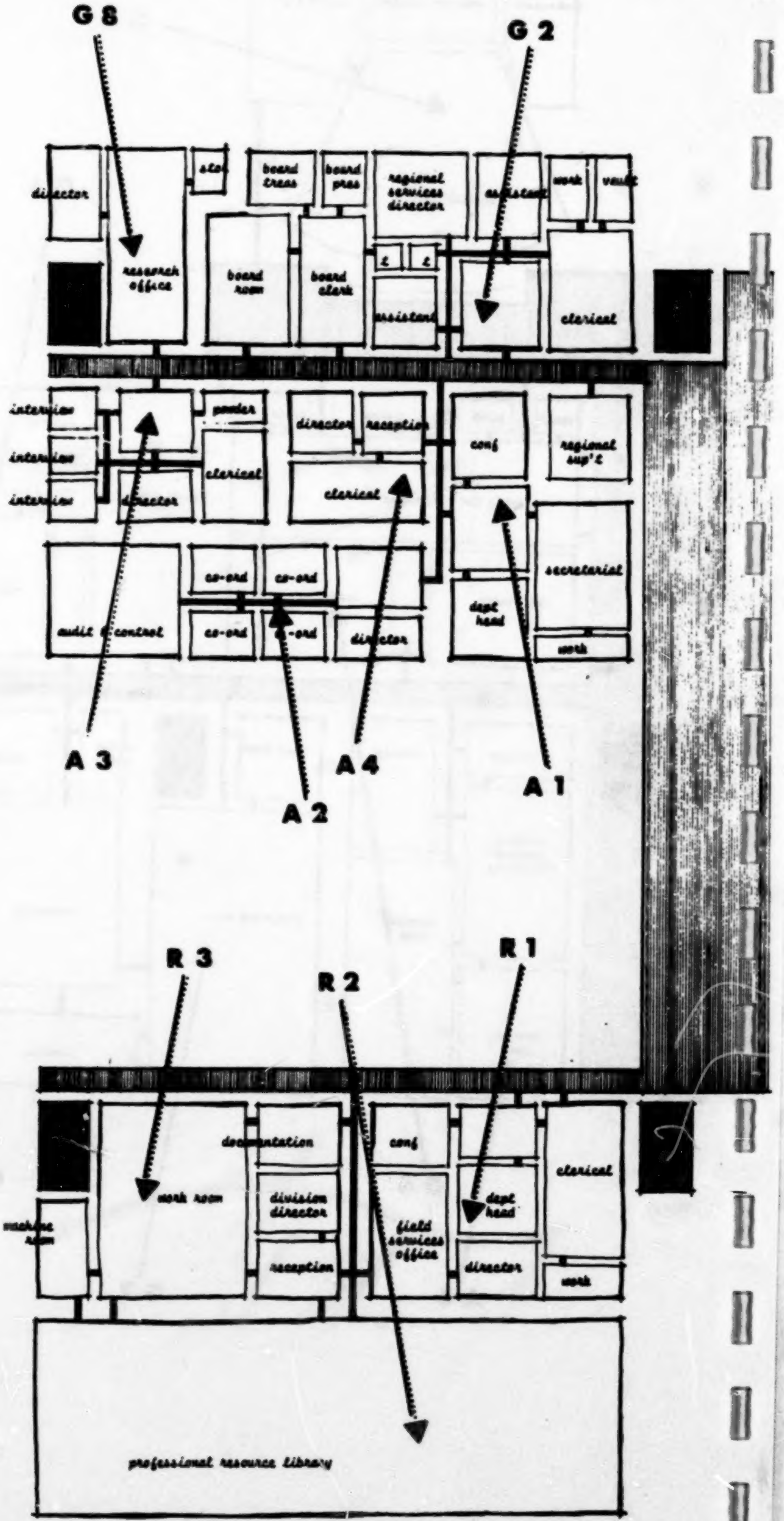
reception and clerical	225	
division director	150	
file room	600	
co-ordinators offices (4 @ 150)	600	
conference area*		
testing room	500	
large-group area	500	2,575

C-6 Demonstration and Training

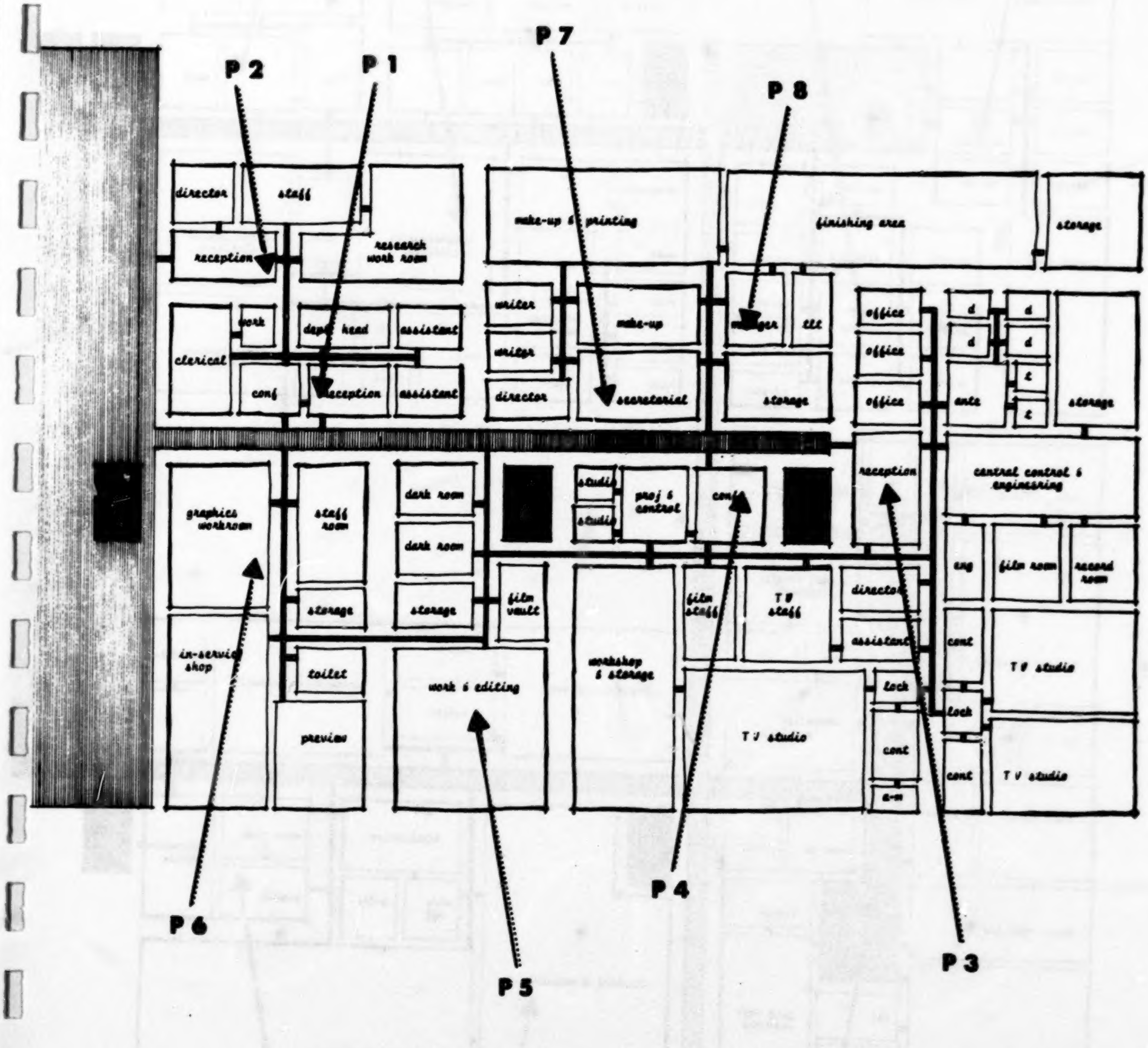
reception and clerical	150	
division director	150	
assistant director	150	
conference room	225	
ready room	50	
storage area	100	
demonstration technician	150	
demonstration center **	600	
demonstration classroom	800	
demonstration classroom	800	
rear projection	200	
student-teacher resource area	150	
student-teacher co-ordinator	150	
conference area***		
supervisors offices (4 @ 120)	480	4,155

---

* use conference areas in C-1 and C-2.
** may be a part of the public lobby G-1.
*** use conference area in C-1.


G 8
G 2
director
stor
board treas
board pres
regional services director
assistant
work
vault
research office
board room
board clerk
t
t
assistant
clerical
interview
interview
interview
powder
clerical
director
director
reception
clerical
conf
regional sup't
secretarial
dept head
work
audit & control
co-ord
co-ord
co-ord
co-ord
director
A 3
A 4
A 2
A 1
R 3
R 2
R 1
documentation
division director
reception
work room
machine room
conf
field services office
dept head
director
clerical
work
professional resource library

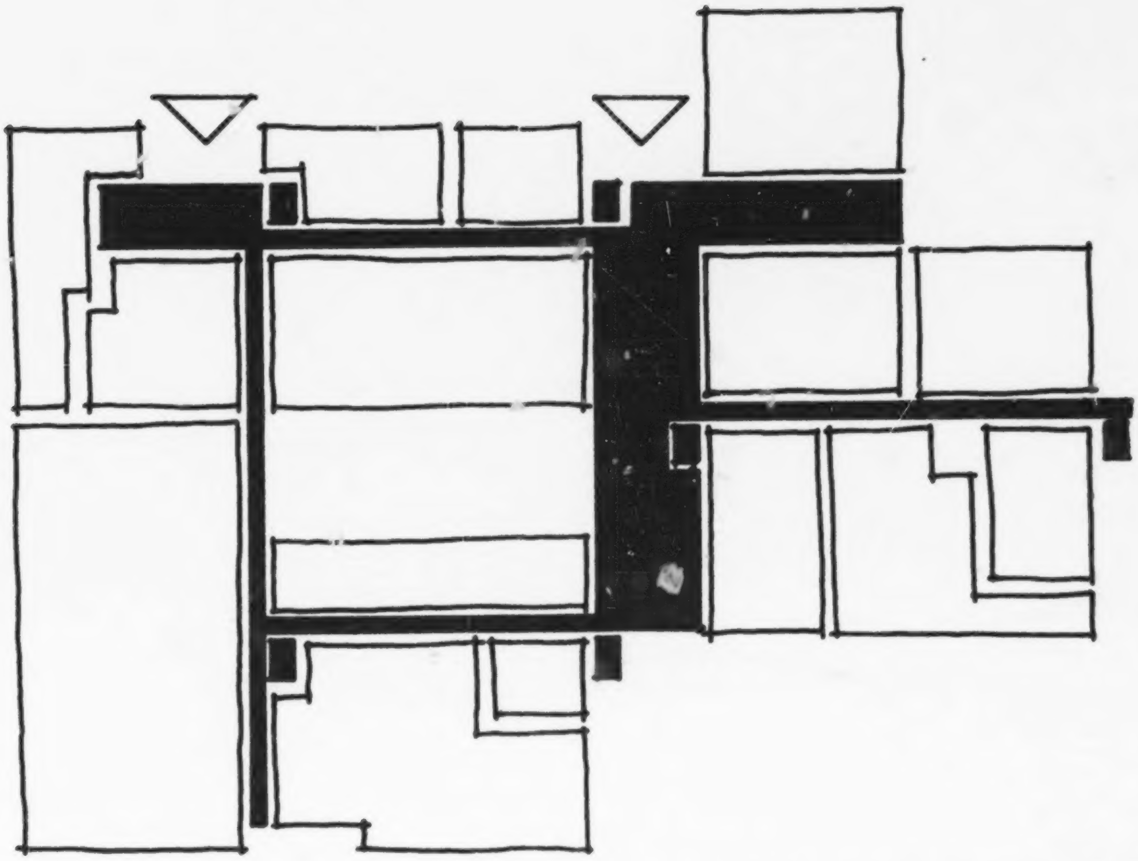
SCHEMATIC


P 7
P 2
P 1
P 8
director
staff
reception
research work room
make-up & printing
finishing area
storage
clerical
work
dept head
assistant
conf
reception
assistant
writer
writer
director
make-up
secretarial
manager
ttt
storage
office
office
office
d
d
d
d
ante
t
t
storage
graphics workroom
staff room
storage
toilet
in-service shop
preview
dark room
dark room
storage
film vault
work & editing
studio
studio
proj & control
conf
workshop & storage
film staff
TV staff
director
assistant
reception
central control & engineering
eng
film room
record room
cont
TV studio
lock
lock
cont
TV studio
cont
a-v
TV studio
P 6
P 5
P 4
P 3

2

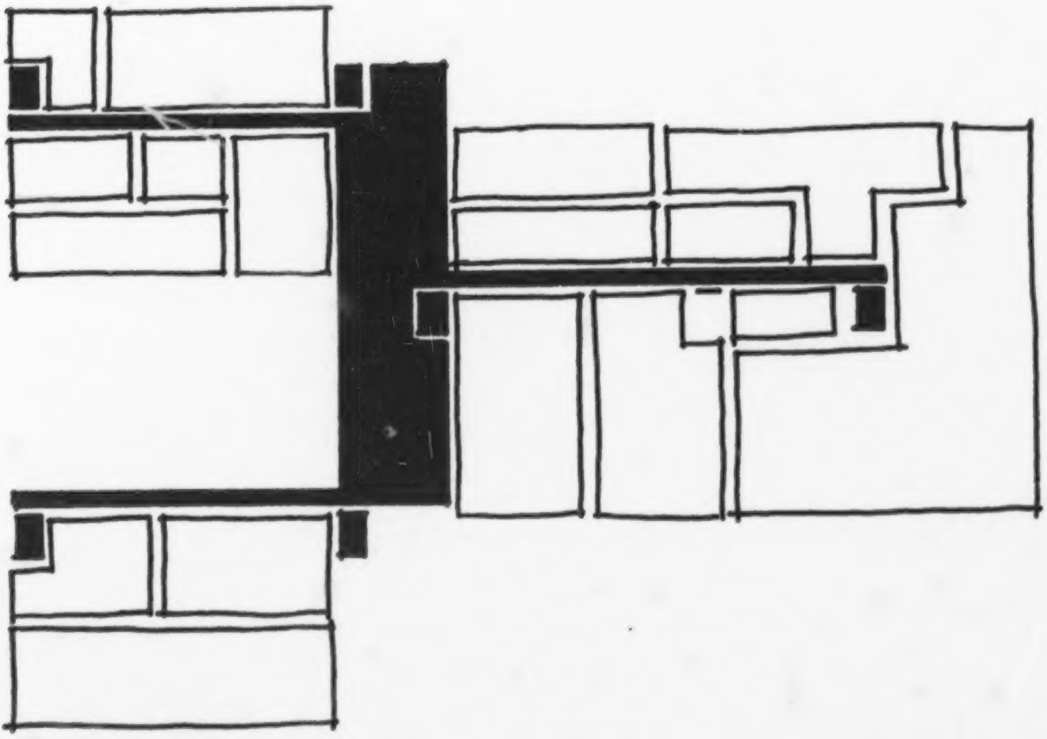
UPPER LEVEL

SCHEMATIC



CIRCULATION

(dark areas are main circulation paths; blocks indicate vertical paths)



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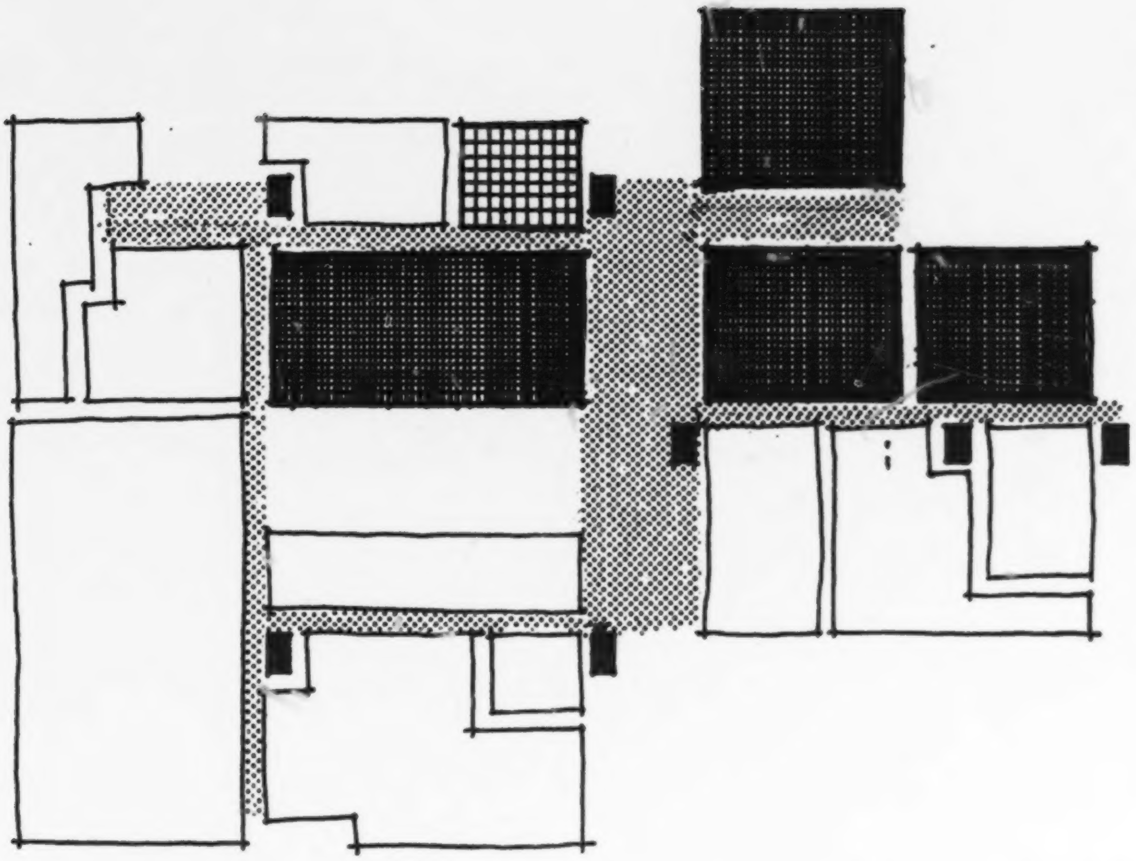
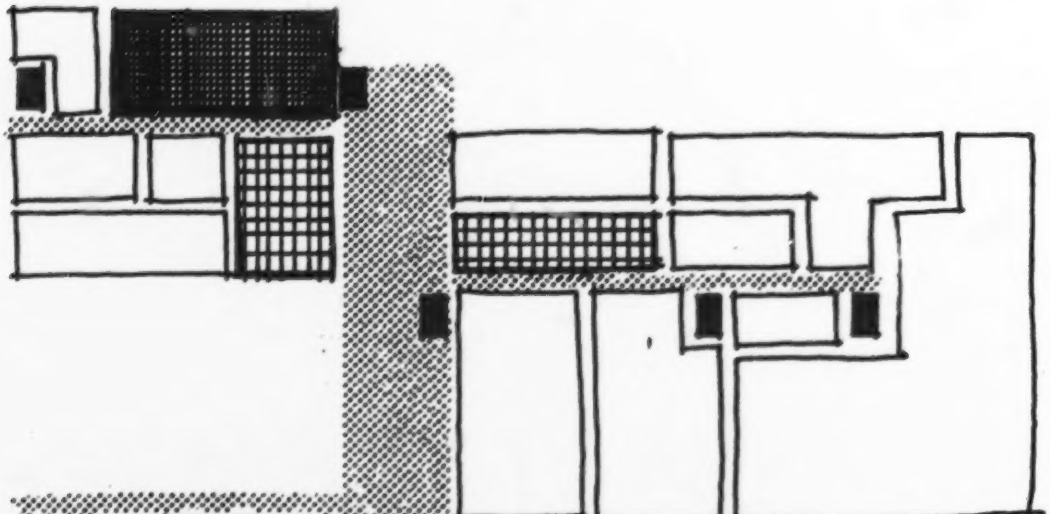


PUBLIC AREAS

(darkest areas are the most used by the public)



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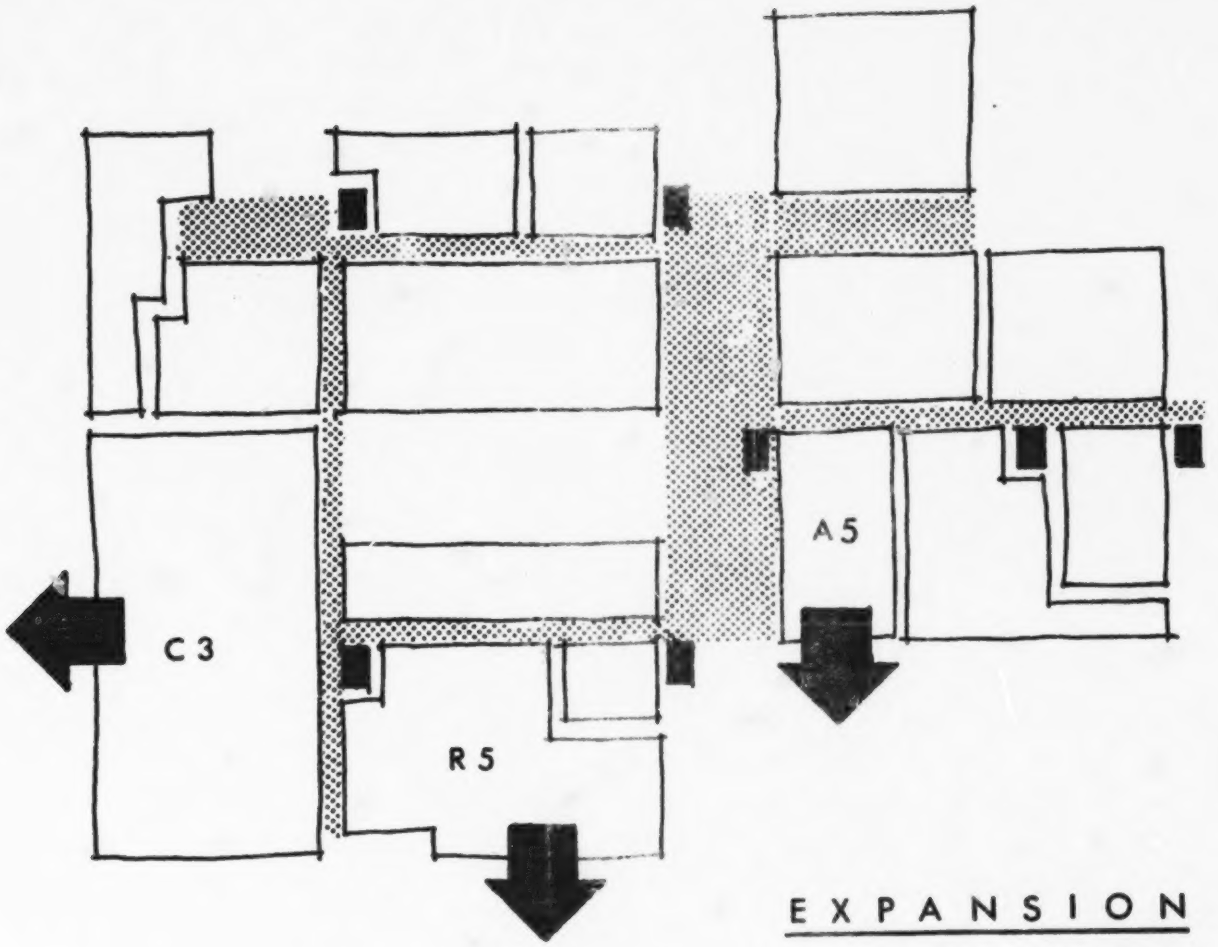
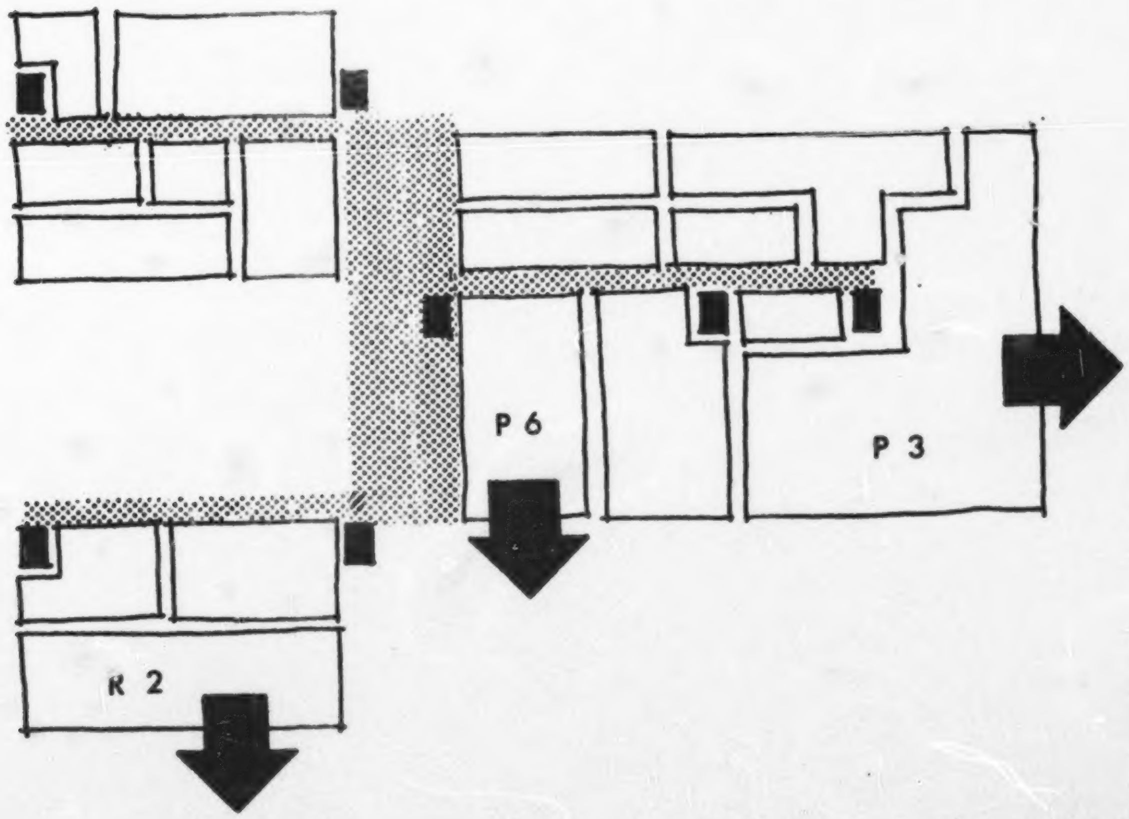
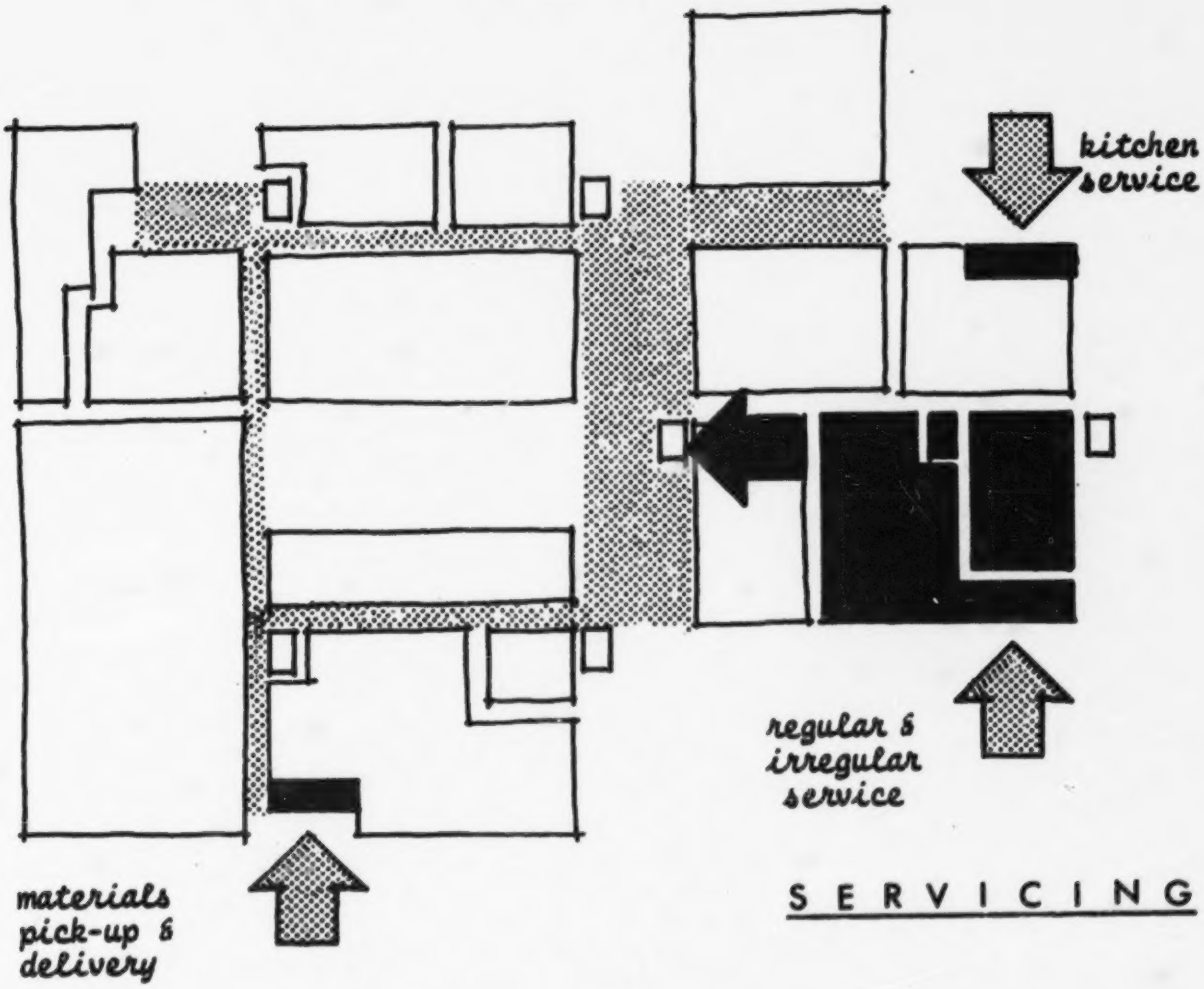


EXPANSION

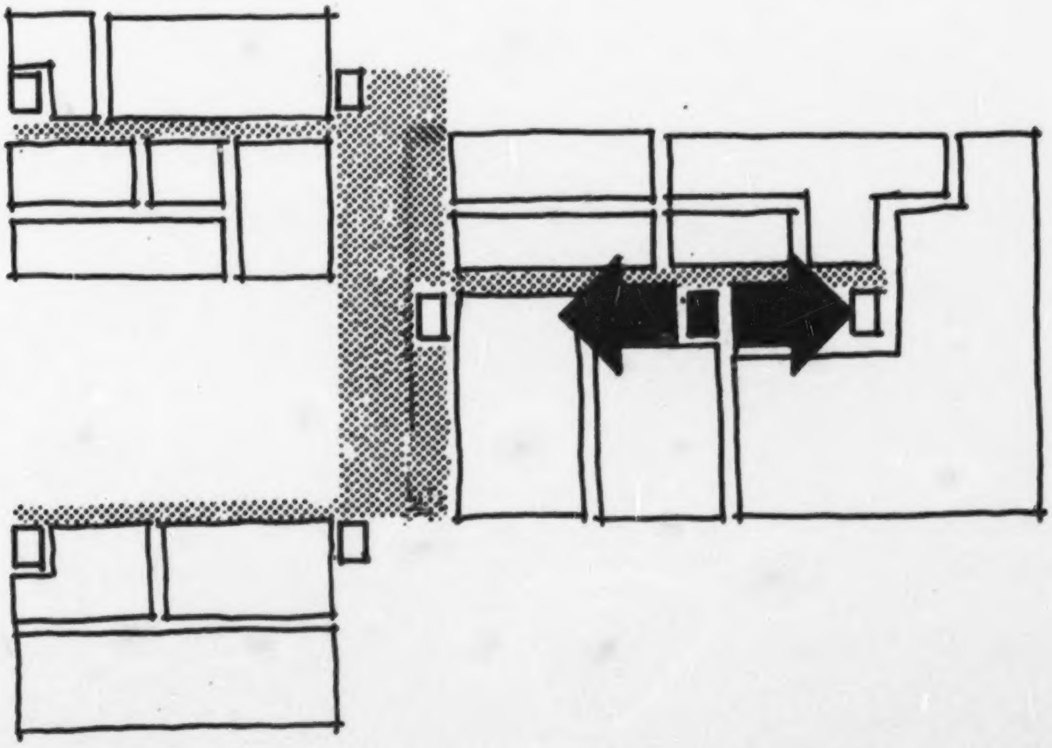
(arrows indicate components most likely to expand)



SCHEMATIC


kitchen service
regular & irregular service
materials pick-up & delivery

SERVICING



METHODOLOGY AND SOURCES

ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965
(Public Law 89-10)

TITLE III - SUPPLEMENTARY EDUCATIONAL CENTERS AND SERVICES
(Sections 301-308)

SECTION 303. Grants under this title may be used, in accordance with applications approved under Section 304(b) for --

(a) planning for and taking other steps leading to the development of programs designed to provide supplementary educational activities and services described in paragraph (b), including pilot projects designed to test the effectiveness of plans so developed; and

(b) the establishment, maintenance, and operation of programs including the lease or construction of necessary facilities and the acquisition of necessary equipment, designed to enrich the programs of local elementary and secondary schools and to offer a diverse range of educational experience to persons of varying talents and needs by providing supplementary educational services and activities such as --

(1) comprehensive guidance and counseling, remedial instruction, and school health, physical education, recreation, psychological, and social work services designed to enable and encourage persons to enter, remain in, or reenter educational programs, including the provision of special educational programs and study areas during periods when schools are not regularly in session;

(2) comprehensive academic services and, where appropriate, vocational guidance and counseling, for continuing adult education;

(3) developing and conducting examplary educational programs, including dual-enrollment programs, for the purpose of stimulating the adoption of improved or new educational programs (including those described in section 503(a)(4)*in the schools of the State;

(4) specialized instruction and equipment for students interested in studying advanced scientific projects, foreign languages, and other academic subjects which are not taught in the local schools or which can be provided more effectively on a centralized basis, or for persons who are handicapped or of preschool age.

(5) making available modern educational equipment and specially qualified personnel, including artists and musicians, on a temporary basis to public and other non-profit schools, organizations, and isstitutions.

(6) developing, producing, and transmitting radio and television programs for classroom and other educational use;

(7) providing for special educational and related services for persons who are in or from rural areas or who are or have been otherwise isolated from normal educational opportunities, including where appropriate, the provision of mobile educational services and equipment, special home study courses, radio, television and related forms of instruction, and visiting teachers programs; and,

(8) other specially designed educational programs which meet the purposes of this title.

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* This paragraph refers to "programs for conducting, sponsoring, or cooperating in educational research and demonstration programs and projects such as (A) establishing and maintaining curriculum research and innovation centers to assist in locating and evaluating curriculum research findings, (B) discovering and testing new educational ideals (including new uses of printed and audio-visual media) and more effective practices, and putting into use those which show promise of success . ."

consultants

PROJECT ADVISORY COMMITTEE

these members of the Rensselaer faculty and architectural research staff provided continuous guidance through the project and the preparation of the report:

Harry E. Rodman, Professor of Architecture.

Morton C. Gassman, Associate Professor of Architecture.

Alan C. Green, Assistant Professor of Architecture.

INTERVIEWS CONDUCTED

throughout the project, several formal and informal interviews were conducted by the author:

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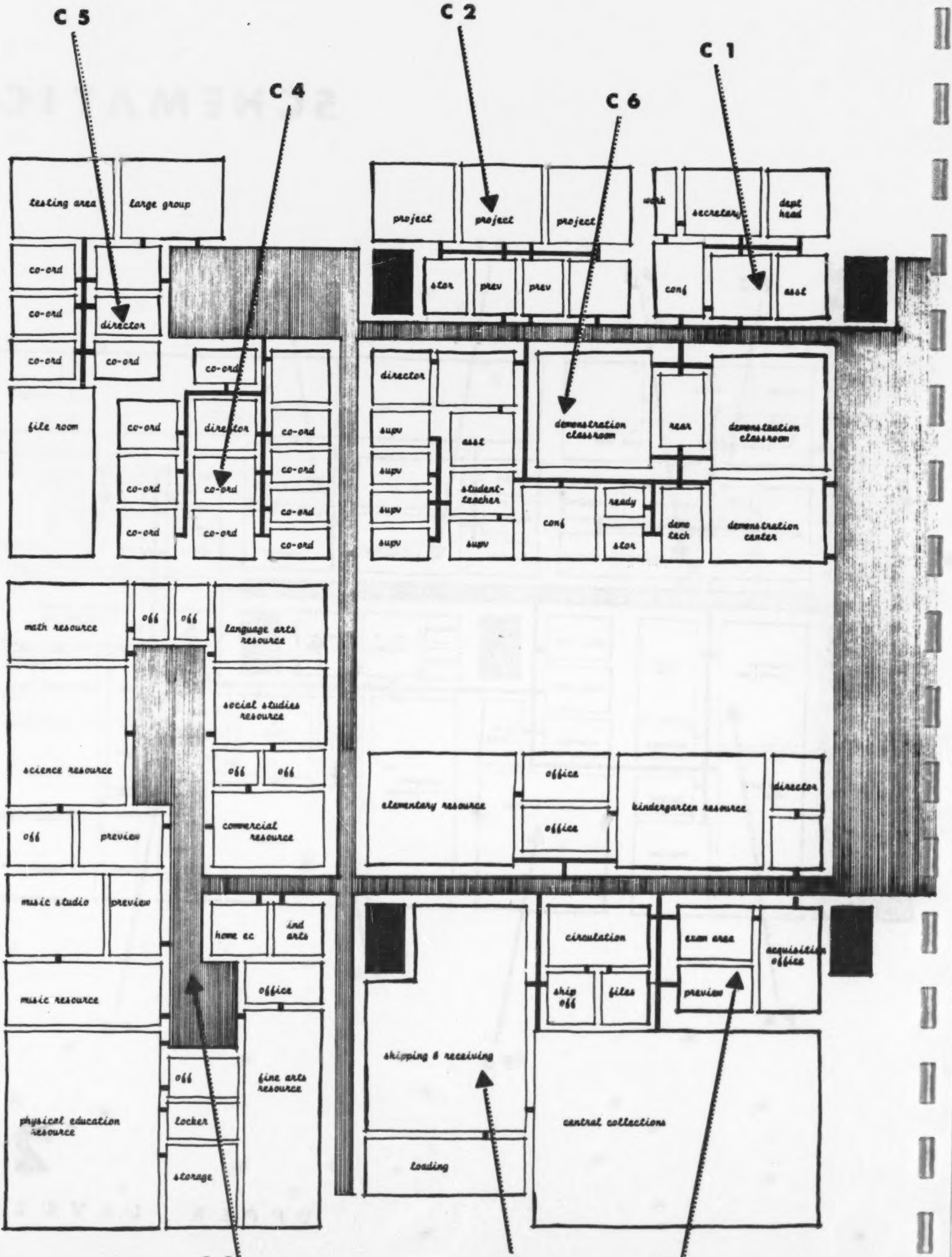
Seymour Eskow, President, Rockland County Community College, Suffern, New York.

Leonard H. Freiser, Director of the Education Centre Library, Education Centre, Toronto.

Susan Houston, Documentation Section, Education Centre Library, Education Centre, Toronto.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Norman D. Kurland, Director, Center on Innovation, State Education Department, Albany.

Mel E. Fountaine, Head, Documentation Section, Education Centre Library, Education Centre, Toronto.

Robert Lang, Production Staff, Erie County BOCES #1, Harkness Center, Buffalo, New York.

Richard H. Mattern, Jr., Market Research, Instructional Systems Development Department, International Business Machines, Yorktown Heights, New York.

Ira J. Singer, Director of Curriculum Development, Erie County BOCES #1, Harkness Center, Buffalo, New York.

Esther M. Swanker, Consultant on Supplementary Educational Centers and Services, State Education Department, Albany.

Jack Tanzman, Director of Audio-Visual Communications, Plainview-Old Bethpage Schools, Plainview, New York.

Robert E. Taylor, Instructional Media Consultant, Westchester County BOCES #1, Yorktown Heights, New York.

SEMINAR PARTICIPANTS

the author sat in on two seminars conducted on Title III by the State Education Department. Many of the views expressed by these participants are evident in this report:

Lee E. Campion, Director, Division of Educational Communications, State Education Department, Albany.

Dean Corrigan, Professor of Education, University of Rochester, Rochester, New York.

Frank Cyr, Professor, Teachers College, Columbia University, New York.

Hendrick Gideon, Consultant on Title III, U.S. Office of Education, Washington, D.C.

Phil Lange, Professor, Teachers College, Columbia University, New York

Dinah Lindauer, Co-ordinator under the Library Services Construction Act, Nassau Public Library System, Hempstead, New York.

Rev. John Nevins, Superintendent of Diocesan Schools, Albany Diocese, Albany, New York.

Clarence Spain, Director of Census and Research, Schenectady City School District, Schenectady, New York.

visits

17 February	visit to Instructional Systems Development Department, IBM, Thomas Watson Research Center at Yorktown Heights, New York.
17 February	visit to Production Center, Westchester County BOCES #1 at Yorktown Heights, New York.
18 February	visit to Bedford Central School District #2, Mount Kisco, New York.
18 February	visit to Rockland County Community College, Suffern, New York
29 March	visit to Toronto Education Centre, Toronto, Ontario.
30 March	visit to Harkness Center, Erie County BOCES #1, Buffalo, New York

conferences

23 March	First Planning Session on Supplementary Educational Centers and Services at the Education Building, Albany.
28 April	Second Planning Session of Supplementary Educational Centers and Services at the Inn Towne Motel, Albany

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